TOWN OF BARRINGTON, NEW HAMPSHIRE REQUEST FOR QUALIFICATIONS

Professional Engineering ServicesQualifications

DUE FEBRUARY 1, 2021







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Section 1Cover Letter



Gale Associates, Inc.

6 Bedford Farms Drive, Suite 101 | Bedford, NH 03110 P 603.471.1887 F 603.471.1809

www.galeassociates.com

February 1, 2021

Mr. Conner MacIver, Town Administrator Town of Barrington 333 Calef Highway Barrington, NH 03825

Re: Qualifications for Professional Engineering Services

Dear Mr. MacIver:

Gale Associates, Inc. is pleased to present our qualifications to provide on-call engineering and consulting services to the Town of Barrington. Gale has a strong interest in being a technical resource to the Town. In preparing for our response, we have read the Request for Qualifications (RFQ) and acknowledge the contents. We are in receipt of one (1) addendum that was posted in association with this RFQ. Gale has the in-house and sub-consultant team capabilities to provide all the professional services to assist the Barrington community as needed.

Established in 1964, Gale Associates has provided planning, design, permitting, and construction phase services to federal, state, and municipal, and private clients for over 56 years. Our firm employs over 100 professional planners, architects, engineers, and support staff in offices located in New Hampshire, Massachusetts, Connecticut, Maryland, Virginia, and Florida. Gale's broad expertise of professionals and geographical locations have allowed us to share approaches from other parts of the country, provide responsive on-call services, and advocate community goals. Currently, we service a multitude of communities from New Hampshire and the northeast states, to Florida. Our approach is to listen to the communities and provide the appropriate level of services to support community goals.

Mr. Scott M. Bourcier, P.E., LPA will serve as the Project Director. He has over 20 years of civil engineering experience and has worked with Select Boards, Town Administrators, Planning Boards, Highway / Public Works Departments, and Recreational Departments. He supported the City of Somersworth as their Contract City Engineer for three years while the City searched for a full-time engineer. He will be assisted by a project team with extensive experience providing study, design, permitting, and construction services.

We appreciate your consideration of our qualifications and welcome an opportunity to meet with you to discuss the Town's goals and our approach to assist in achieving these goals. We encourage you to contact our references regarding Gale's quality of technical service and responsiveness. Please do not hesitate to contact Mr. Bourcier (day or night) at the office (603-471-1887), cell (603-828-8788) or via email (smb@gainc.com). Thank you.

Best regards,

GALE ASSOCIATES INC.

Jon F. Lindberg, P.E.

Principal

Scott M. Bourcier, P.E., LPA

Project Director



Section 2 Firm Profile







THIS IS GALE

Established in 1964, Gale Associates, Inc. is a design and consulting firm of civil engineers, landscape architects, building enclosure specialists, structural engineers, and aviation engineers and planners. We focus on the repair, renovation, and adaptive reuse of existing sites, municipal infrastructures, and buildings. Gale provides consulting and design services to both the public and private sectors. Our offices in New Hampshire, Massachusetts, Connecticut, Maryland, Virginia and Florida are managed by the corporate headquarters located in Weymouth, MA. We provide a Collaborative culture, which encourages Opportunity for staff, Respect and a work/life Equilibrium balance that result in a COORE set of values. Gale strives to be recognized annually as a "Best Firm to Work For." Strong work ethics and exceptional client service is a direct result of our staff's enthusiasm and excitement in our workplace.

Gale's Mission:

Gale is a collaborative firm of Engineers, Architects, and Planners. We understand our clients' unique needs and create practical, reliable, and sustainable solutions for their sites, facilities and infrastructure. Our culture encourages respect, provides opportunity, supports a work-life balance, and strives for client satisfaction.

Gale's Vision:

To be a premier design and consulting firm recognized for empowering employees, developing trusted relationships, and providing practical solutions to meet our clients' individual needs.





Dog Friendly Workplace!



Company 5k Run to support local Food Pantry



Clothing Drive for the Department of Children and Families

GALE

Civil Engineering

Landscape Architecture Athletic Facilities
Planning and Design

Building Enclosure Design and Consulting Structural Engineering Airport Engineering and Planning

Civil Engineering – Gale's Civil Engineering Group provides comprehensive civil engineering study, design, permitting, bidding, and construction phase services. We are experienced in transportation infrastructure (road, pedestrian, and multi-modal), utility infrastructure (water, sewer, drainage), hydrologic & hydraulic (H&H) modeling, stormwater management, Low-Impact Development (LID), ADA guidelines, traffic control (MUTCD), site layout, grading, and general construction. Our projects service federal, state, community, and private clients.



Landscape Architecture – Our Landscape Architecture Group encompasses all elements of design, restoration, and reservation of outdoor space. Our services include program development, concept and detailed design, document production, and presentation imaging. We are experienced in low-cost, low-maintenance, sustainable, but aesthetically beautiful designs. Our project types range from municipal schools and public buildings, to athletic facilities, parks and recreational areas.

Athletic Facilities Planning and Design – Gale's Athletic Facilities Consulting Group provides comprehensive athletic planning, design, and construction phase services. We are experienced in campus condition evaluations, program demand assessments, and master planning. We design high-use athletic fields of both natural and synthetic turf, and hard-court facilities that are well-integrated within school campuses and communities and are turn-key (lighting, irrigation, scoring infrastructure, and buildings).



Building Enclosure Design and Consulting – Our Building Enclosure Group conducts forensic evaluations, designs repairs, and construction phase services for all exterior building enclosure

components including renovation/repair of roofs, walls, windows/glazing, and waterproofing. We specialize in issues related to air and moisture intrusion, and the effects of weather on exterior envelope assemblies and components. We assist architectural firms and clients with peer review consulting on new construction projects including building enclosure commissioning, forensic and expert witness services, and preventative maintenance programs.

Structural Engineering – Gale's Structural Engineering Group provides forensics, analysis, and design of steel, concrete, masonry, timber, and composite structures of varying types for both existing and new construction. We

specialize in concrete foundation design, waterproofing, structural stabilization, strengthening, effects of wind and snow load, seismic retrofits, concrete and timber repair, and parking garage restoration/protection.

Airport Engineering and Planning – Our Airport Engineering and Planning Group provides planning, permitting, design, and construction phase services to public and private aviation clients. Gale excels in navigating the numerous regulatory, permitting, and approval processes unique to the aviation industry. We provide a full range of services for airport and building infrastructure improvements, both airside and landside.





Section 3 Project Team

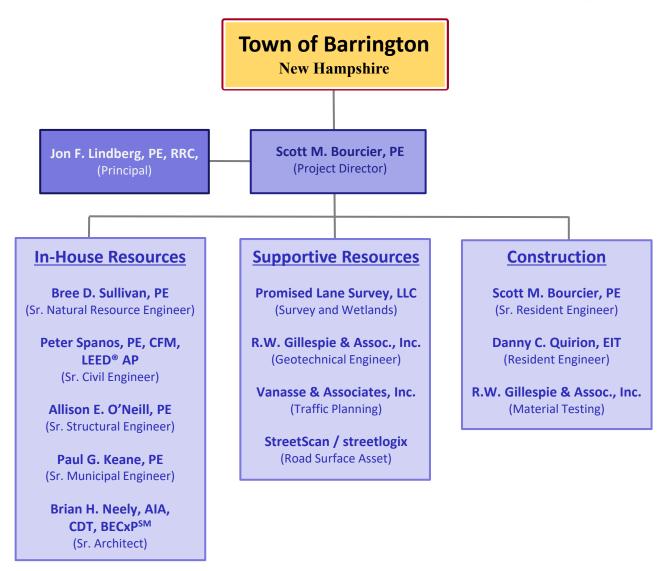


Town of Barrington, New Hampshire

Professional Engineering Services

PROJECT TEAM







JON F. LINDBERG, P.E. PRINCIPAL

As a Principal of the Corporation, Mr. Lindberg is responsible for the administration and coordination of business operations. Employed at Gale since 1980, he is responsible for the company's performance in accordance with contract requirements and provides quality control and assurance. He provides technical consulting and project management services to public and private clients nationally.

PROJECT EXPERIENCE

Town Engineer and Planning Board Representative, Quincy, MA

Review of subdivision and site plan applications and associated construction observations submitted to the Planning Board for roadways, intersections, traffic impact, stormwater runoff, utilities (water/sewer), geotechnical, and erosion control to conform to Federal, State and City/Town zoning ordinance and development regulations.

Village Hill, Northampton, MA

Master planning, roadway design, embankment restoration, watershed analysis, multi-use trail design, utility design and permitting, and hazardous materials mitigation for the redevelopment of a former state hospital into a 126-acre mixeduse community.

Carriage Grove, Belchertown, MA

Design and permitting for a 2,000 linear foot roadway to facilitate mixed-use development at the former Belchertown State School; roadway includes stormwater and utility design, traffic circle, and infiltration basin.

Union Point, Weymouth, MA

Multiple assignments at the 1,000+ acre urban redevelopment site (former naval air base) including a 36-unit residential cluster development, peer review, stormwater analysis and design, as well as roadway layout and profiles; design and permitting of a stormwater weir and slope stabilization at the TACAN outfall ditch.

Portsmouth Naval Shipyard, Kittery, ME

Managed a team that completed wetland delineation, property boundary surveys, utility and topographic surveys for four (4) Naval Bases totalling over 15,000-acres; sites were Rangeley SERE School, Cutler NCTAMSLANT DET, Prospect Harbor NAVSUPACTPN and Dow Pines GPOAC; deliverables included PLS stamped plans, CAD files and a GIS database with 2 cm accuracy.

Minuteman High School Improvements, Lexington, MA

ADA and pavement evaluation of entire school campus; design, permitting and construction administration of a roadway and entrance plaza reconstruction project.

Central Fire Station, Groton, MA

Design, and permitting phase services for a new Central Fire Station including plans for first responder parking and access, public/guest vehicular circulation and safety, collaboration with the town's Conservation Commission and Planning Board's industry leading LID stormwater regulations.

Echo Avenue, Weymouth, MA

Road reconstruction project involving road widening and full depth reconstruction, drainage design and utility relocation.



EDUCATION

Lesley College, Cambridge, MA, Master of Science Business Management

University of Maine, Orono, BSCE

REGISTRATIONS AND CERTIFICATIONS

Registered Professional Engineer – NH #7096 (18 additional states)

National Council of Examiners for Engineering and Surveying (NCEES Certified 9539)

Confined Space Entry Certified (per 29 CFR 1910.146)

OSHA 10-Hour Construction Course

AFFILIATIONS

National Institute of Building Sciences (NIBS)

American Society for Testing and Materials (ASTM)

Society of American Military Engineers (SAME) Past Post President, Member of the Academy of Fellows, Boston Post Board of Directors



SCOTT M. BOURCIER, P.E., LPA PROJECT DIRECTOR

Mr. Bourcier has over 20 years of civil engineering experience in study, design, permitting, and construction observation for municipal, state, and federal clients, with a wide range of projects. His broad breath of civil engineering knowledge encompasses road (design and pavement management), utilities (water, sanitary, drainage), pedestrian infrastructure (ADA accessibility and crosswalks), NHDOT specifications, site development, stormwater management, bridges, dams, and recreation parks. Mr. Bourcier is familiar with local, state and federal regulations and coordinates closely with state and municipal officials.

PROJECT EXPERIENCE

Town Engineer and Planning Board Representative, Various Locations, NH

Review of subdivision and site plan applications and associated construction observations submitted to the Planning Board for roadways, intersections, traffic impact, stormwater runoff, utilities (water/sewer), geotechnical, and erosion control to conform to Federal, State and City/Town zoning ordinance and development regulations for locations throughout New Hampshire including:

Barrington Bow Chester Hampstead Hillsborough Milton Raymond Somersworth

Transfer Station Improvements, Greenland, NH

Engineering study phase services for the evaluation and recommendation solid waste management improvements to the Town of Greenland's existing solid waste transfer station. Project included summary report describing existing conditions, discrepancies regarding site layout and solid waste collection/management, recycling alternatives (Do Nothing, Sort and Single-Stream), cost evaluation (capital and operation) and recommendations.

Road Surface Evaluation Study, Barrington, NH

Town-wide road inventory and surface evaluation. Study included cataloguing and evaluating road surface conditions,

identified Pavement Condition Index (PCI) for road segments, prioritizing road repair segments, recommended repair strategy, and recommended repair maintenance schedule and budget.

Poland Water and Auburn 4 ½ Mile Sewer Extension, Auburn, ME

Engineering design and construction phase services for the 4½ mile sewer utility extension to connect Poland Water bottling plant in Poland, ME to the Auburn Water& Sewer District in Auburn, ME. Project included gravity sanitary sewer, force main sanitary sewer, boring under the St. Laurance & Atlantic Railroad, environmental permitting, and collaboration with Town of Poland, Water & Sewer District, Poland Spring, and selected Contractor.

Memorial Drive Complete Street Reconstruction, Somersworth, NH

Design-Build of a complete streets consisting of full-depth road reconstruction, utility (water and drainage), and pedestrian accessibility (sidewalk, ADA, and crosswalks) improvements of approximately 1,950 linear feet along Memorial Drive. Project included preparing performance specification bid documents (including quantity estimate), bid phase services, design-build construction phase services, and collaboration with City officials and selected Contractor.



EDUCATION

University of New Hampshire, BSCE

REGISTRATIONS AND CERTIFICATIONS

Registered Professional Engineer NH #11910

NHDOT LPA Certification: (Parts 1 & 2) #1077

OSHA 10-Hour Construction Course

AFFILIATIONS

New Hampshire Public Works Association (NHPWA)

American Society of Civil Engineers (ASCE)

Bike-Walk Alliance of New Hampshire (BWA-NH) Member No. 6957

Rail-to-Trails Conservancy (RTC) Member No. 6341360

Granite State Wheelmen (GSW) Member No. 6957

VOLUNTEER

Bedford, NH Water & Sewer Advisory Committee



SCOTT M. BOURCIER, P.E., LPA PROJECT DIRECTOR EXPERIENCE

Indigo Hill Road Complete Street Reconstruction, Somersworth, NH

Design-Build of a complete streets consisting of full-depth road reconstruction, utility (water, sewer, and drainage), and pedestrian accessibility (sidewalk, ADA, crosswalks) improvements of approximately 4,700 linear feet along Indigo Hill Drive. Project included preparing performance specification bid documents (including quantity estimate), bid phase services, design-build construction phase services, and collaboration with City officials and selected Contractor.

North Pond Road Reconstruction, Chester, NH

Engineering design and construction phase services for the full-depth reconstruction of approximately 3,500 linear feet of North Pond Road. Project included survey, subsurface geotechnical investigation, wetland delineation, roadway improvements, drainage improvements, filing of NHDES wetlands permit, construction observation / administration, and collaboration with Town officials and selected Contractor.

East Derry Road Reconstruction and Reclamation, Chester, NH

Engineering design and construction phase services for the combination full-depth reconstruction and reclamation of approximately 5,100 linear feet of East Derry Road. Project included survey, subsurface geotechnical investigation, wetland delineation, roadway improvements, drainage improvements, filing of NHDES wetlands permit, construction observation / recording, and collaboration with Town officials and selected Contractor.

Prescott Road Reconstruction & Bridge Replacements, Brentwood, NH

Engineering design and construction phase services for the full-depth

reconstruction of approximately 3,600 linear feet of Prescott Road. Project included survey, subsurface geotechnical investigation, wetland delineation, roadway improvements, intersection conversion from a Y to a T-layout, hydrologic & hydraulic (H&H) evaluation, two (2) pre-cast concrete bridge replacements, drainage improvements, filing of NHDES wetlands permit, NHDES filing stream crossing permit, NHDOT driveway permit for NHDOT maintained North Road, construction observation / recording, and collaboration with Town officials and selected Contractor.

Dover Point Road Bicycle Shoulder Corridor Study, Dover, NH

Engineering study for the Transportation Enhancement (TE) Engineering Report for the Dover Point Road Bicycle Shoulder Corridor (State Project No.: 13128). The report was prepared to evaluate and recommend bicycle corridor alternatives to assist commuters utilizing alternative modes of transportation to, from and within the City of Dover. Project included site evaluation, planning/recommendation of bicycle routes, prepare conceptual plans of feasible alternatives, quantity take-off/cost estimating, and summary report.

Safe Route to School Pedestrian Improvements, Hillsborough, NH

Engineering study, design, and construction phase services for the FHWA funded / NHDOT administered, town managed pedestrian improvements of approximately 1,100 linear feet along Brown Street, Church Street, and Walnut Street in association with the Hillsborough-Deering Elementary and Middle Schools. Design included survey, pedestrian accessibility (sidewalk, ADA, and crosswalks), NEPA documentation, construction observation / recording, and collaboration with NHDOT officials, town officials, and selected contractor.

Safe Route to School Pedestrian Improvements, Gilford, NH

Engineering feasibility study, design, and construction phase services for pedestrian improvements along Alvah Wilson Road to service the Gilford Elementary and High Schools. The project was funded by FHWA, administered by NHDOT, and managed by the town. Project improved sidewalk and crosswalk infrastructure in compliance with ADA guidelines, mitigated traffic conflicts, and environmental impacts.

Safe Route to School Pedestrian Improvements, Seabrook, NH

Engineering feasibility study (travel plan) for the FHWA funded / NHDOT administered, Town managed pedestrian improvements within a 1-mile radius of the Seabrook Elementary and Middle Schools. Study evaluation pedestrian access, ADA conflicts, traffic conflicts, and environmental impacts.

Cat Path Drainage Improvements, Gilford, NH

Stormwater evaluation study to address flooding and erosion issues at the intersection of Cat Path, Henderson Road and NH Route 11B. Project included site assessment of existing conditions, watershed delineation, drainage analysis, and recommended improvement measures. Once the Town selected the recommended alternative, construction and permitting plans were developed implementing the recommended alternative for ultimate discharge to Gunstock River.

Worthley Brook Culvert Replacement, MEDOT District 6 Office, Poland ME

Hydrologic & Hydraulic (H&H) Study for the culvert replacement over Worthley Brook. Project included evaluating site conditions, completing a H&H evaluation, and preparing a summary report with cost estimates.



BREE D. SULLIVAN, P.E. SENIOR NATURAL RESOURCE ENGINEER

Ms. Sullivan has over 20 years of civil engineering experience in study, design, and permitting for both public and private sector projects. Her broad breath of civil engineering knowledge encompasses corridor reconstruction (road, water, sewer, and drainage), hydraulics & hydrology (H&H) evaluation, bridge/culvert condition assessments, and site development. Ms. Sullivan is familiar with local, state and federal regulations and coordinates closely with state and municipal officials throughout the New England area.

PROJECT EXPERIENCE

Drainage Basin Flood, Boston, MA

Flooding analysis of the Massachusetts Water Resources Authority/Boston Water and Sewer Commission greater Boston drainage basin system. Used SWMM software to analyze the existing systems, calibrated the numerical model and analyzed proposed mitigation alternatives.

State-Wide Bridge Inspection MassDOT – Multiple Locations

multi-year contract for inspection of single and multi-span bridges and culverts in accordance with federal and MassDOT procedures and guidelines. Services included field inspections, deficiency documentation, coordination with state and local authorities. In several instances, assessment included on-site hazard determination for use restriction/bridge closure.

Culvert Replacement, Bolton, MA

Stormwater and stream evaluation study to support 8-foot span culvert replacement project. Design services included survey, stream reconnaissance, subsurface investigation, stormwater and stream (H&H) modelling, scour analysis, wetland permitting, NHESP coordination, wildlife habitat connectivity/stream simulation culvert, bid and construction phase services.

Culvert Replacement, Grafton, MA

Stormwater and stream evaluation study to support 14-foot span culvert replacement project. Design services included stream reconnaissance, stormwater and stream (H&H) modelling, scour analysis, scour countermeasures, wetland permitting, NHESP notification/coordination, wildlife habitat connectivity/stream simulation culvert, wetland replication, sediment sampling, temporary stream flow attenuation/cofferdams for construction, bid and construction phase services.

Culvert Replacement, Boxford, MA

Stormwater and stream evaluation study for an 8-foot span culvert replacement project. Design services included grant writing, stream reconnaissance, stormwater and stream (H&H) modeling, scour analysis, wetland permitting, NHESP notification/coordination, wildlife habitat connectivity/stream simulation culvert and bid-phase services.

Great Road/I-495 Infrastructure Upgrades, Littleton, MA

Stormwater and stream evaluation study for infrastructure improvements to support The Point mixed-use development. Design included grant writing, wetland delineation, stormwater treatment, drainage improvements, and filing of MassDEP wetland permit, environmental reviews (NEPA, Hazmat assessment, Section 106, Section 4f, Endangered Species)



EDUCATION

University of Massachusetts, Amherst, BSCE (Cum Laude)

REGISTRATIONS AND CERTIFICATIONS

Registered Professional Engineer – NH #16702 MA #48441

FHI/NHI Trained Bridge Inspector

Confined Space Entry Certified (per 29 CFR 1910.146)

OSHA 10-Hour Training

NH Subsurface Disposal System Designer #1766 (expired)

AFFILIATIONS

Women in Transportation (WTS) – Boston Chapter

Tau Beta Pi - Engineering Honor Society

Chi Epsilon - Engineering Honor Society



PETER SPANOS, P.E., CFM, LEED® AP SENIOR CIVIL ENGINEER

Mr. Spanos responsible for project management and engineering services including site layout, grading, stormwater management and utilities design (water, sewer, and drainage). He is a Registered Professional Engineer and has 20 years of direct site design and permitting of land development projects. Technical focus includes site drainage analysis, utility improvements, road layout, water and wastewater systems, parking lot layout, and flood mitigation.

PROJECT EXPERIENCE

The Village at Marshfield, Marshfield, MA

Design and permitting of an on-site wastewater treatment facility for a 24-building, 276-unit apart. complex with an average wastewater flow 57,000 GPD.

Meredith Way, Weymouth, MA

Site design for 21 single-family residential units including design for new watermain and sewer service including force main.

King Philip Region HS, Wrentham, MA

Sanitary sewer and potable water improvements to included domestic / fire protection service upgrades, remedial action to solve odor and treatment problems at the High School's wastewater treatment plant including pump station upgrades and leaching field renovation.

Echo Avenue, Weymouth, MA

Road reconstruction project involving road widening and reconstruction, and utility (water, sewer, drainage) improvements.

Curry College Student Center, Milton, MA

Development of a new, \$32M Student Center, which houses athletic and recreation facilities, performing arts facilities and a new dining center. Site planning, design, permitting for new building and new utilities (water, sewer, and sewer pump station).

Minuteman HS Sewer Pump Station, Lexington, MA

Evaluation of an existing concrete sewer pump station, pumps and mechanical and plumbing systems; design considerations for pump upgrades and/or new pump station to handle future development.

Curry College, Bell Hall, Milton, MA

Civil/site engineering and construction administration for a 100-space parking lot, retaining walls, landscape, stormwater management and new site utilities (water, sewer, and drainage); project is LEED Silver Certified and included bioretention areas, permeable pavers, stone trenches, grass pavers, and infiltration chambers.

Old Colony Square, Cohasset, MA

Design and permitting of a 10,000GPD innovative sewage disposal system at a mixed-use retail/residential development.

Pembroke Woods Apartments, Pembroke, MA

Site design of a 6-building, 144-unit apartment complex including building layout, site grading, drainage analysis and design, site utilities and wastewater treatment facility layout and related permitting.



EDUCATION

University of Florida, BSCE

REGISTRATIONS AND CERTIFICATIONS

Registered Professional Engineer – MA #48407

Certified Floodplain Manager, US-17-10061

LEED® AP

OSHA 10-Hour Construction Course



ALLISON E. O'NEILL, P.E. SENIOR STRUCTURAL ENGINEER

Ms. O'Neill performs evaluations, engineering/analysis, design and construction phase services for commercial, industrial, and institutional projects constructed with steel, timber, masonry, concrete and other materials. She has extensive experience with analysis and design of precast concrete structures, as well as the rehabilitation of existing structures. Her experience also includes design of new structures using steel, masonry, wood and cast-in-place concrete, including foundation and retaining wall designs. She has a diverse knowledge of project types, which supports the various structural needs of Gale's building enclosure design and consulting group.

PROJECT EXPERIENCE

Executive Drive Parking Structure, West Orange, NJ

Structural engineering design and construction phase services for the 570-car parking structure, which will be connected to adjacent residential buildings and constructed of precast concrete, with an on-grade level, and five and a half elevated levels, one stair/elevator tower and one stair tower within the building footprint; will serve as Structural Engineer of Record.

One Greenway/99 Kneeland Street, Boston, MA

City of Boston Inspectional Services
Department's Ordinance 9.9-12 —
performed visual and limited hands-on
evaluation of facade to identify
deficiencies that would affect the safety of
the building occupants or the general
public; also identified minor deficiencies
for routine repair or monitoring to
maintain the long-term performance of
the building envelope.

City of Lowell, MA

Evaluation, design, bid and construction phase services to address repairs to fire escapes at five (5) public schools.

Boston Children's Hospital Parking Structure, Boston, MA

Evaluation, design, bid, and construction phase services for the repairs of an existing six-level parking structure; the superstructure consists of a combination of precast/prestressed concrete beams supported on cast-in-place concrete girders and walls; repairs will be phased to accommodate the client's budget and high parking demands.

21 Scarsdale Road, Parking Structure and Building Addition, Yonkers, NY

Structural Engineer for the conceptual design of a new 210-space precast/prestressed concrete parking structure and associated foundations; conceptual design for the 4,000 sf building addition and miscellaneous structural modifications to the existing building.

104 Corporate Park Drive Parking Structure, Harrison, NY

Structural Engineer of Record for the superstructure of a new 200-space precast concrete parking structure with solar array supported on the roof level to support proposed panel system.



EDUCATION

University of Massachusetts, Lowell, Master of Science, (Structural) Engineering

University of Massachusetts, Lowell, BSCE

REGISTRATIONS AND CERTIFICATIONS

Registered Professional Engineer – MA #48995 (structural), NY #102726, NJ #24GE05605800, UT #11931748-2202

OSHA 10-Hour Construction Course

Aerial Boom Lift and Scissor Lift Training Certification (United Rentals)

Certification for School Project Designers and Owner's Project Managers (MCPPO)



PAUL G. KEANE, P.E. SENIOR MUNICIPAL ENGINEER

Mr. Keane has over 42 years of civil/municipal engineering experience in the study, design, permitting, funding, and management of both public and private sector projects. His extensive experience in civil engineering, public works administration, and utility/site construction has allowed him to develop a broad base knowledge that encompasses potable water supply and distribution; sanitary sewerage collection and treatment; drainage collection and management; maintenance, repair, reconstruction, and construction of roadways and sidewalks; and other elements of public works.

PROJECT EXPERIENCE

Trask Street Area Infrastructure Improvement Project, Gloucester, MA

Design, permitting, bidding, and construction of infrastructure components including road, sidewalk and utilities (water, sewer, drainage) including coordination with various private utility companies; project involved over 1,000 l.f. of sanitary sewers; 1,500 l.f. of water pipe; and over 2,200 l.f. of road work.

Fort Neighborhood Infrastructure Improvements, Gloucester, MA

Reconstruction of water, sewer mains and services, sewer pump station replacement, storm drain, roadway and sidewalk, as well as coordination with utility companies to replace and upgrade overhead and underground, gas, electric, telephone, and internet lines in support of a new beach front hotel and neighborhood revitalization project; a significant portion of the infrastructure improvements were funded by grants/loans from MassDevelopment.

River Ridge Office Park, Boston-Providence Highway (Route 1), Norwood, MA

Comprehensive planning, design, and permitting of office park involving issues such as zoning, property lines and easements, drainage and stormwater management, archaeological, traffic, geotechnical, site grading, and landscaping and screening, etc.; project required significant MEPA filings including draft, final, and supplemental final EIRs, and significant wetlands filings.

Storm Drainage Maintenance & Upgrade Projects in Multiple Locations, Dedham, MA

Projects included design, permitting, and construction of the Wentworth Street, Rustcraft Road, Hamilton Avenue, East Street, Milton Street, Readville Secondary Railroad Right of Way (abandoned railroad right-of-way town owned), Highland Street, Wilson Avenue, Needham Street, Lower East Street, Harris Street Granite Culvert Collapse, and Bussey Street Culvert Collapse projects.

Essex Avenue Water Main Replacement Project, Gloucester, MA

Installation of over 3,750 linear feet of 20" diameter CLDI pipe water main hydrants and valves on a State Highway, project included insertion of 3-20" line stops, temporary by-pass piping, etc.

Planning Board and Conservation Commission Representative, Gloucester, MA

Projects included Beauport Hotel Project (seaside hotel); Daventry Lane
Subdivision at Niles Beach; Village at
Magnolia Shores, and Deacon Farm Lane
residential subdivision; Fuller School
Multi-Purpose Site Development; and
various Blackburn Industrial Park and
Kondelin Road Industrial Park site plans.

EDUCATION

Northeastern University, BSCE

REGISTRATIONS AND CERTIFICATIONS

Registered Professional Engineer – MA #31818

OSHA 10-Hour Construction Course

AFFILIATIONS

American Society of Civil Engineers (ASCE)



BRIAN H. NEELY, AIA, CDT, BECxPSM SENIOR ARCHITECT

Mr. Neely performs building enclosure evaluations and designs focused on repair, renovation, restoration and energy conservation. His experience includes developing low-maintenance renovations and energy conservation upgrades to public and private facilities. Mr. Neely provides building code reviews including ADA and Massachusetts Architectural Access Board Regulations. He is actively involved with building enclosure peer review and commissioning services.

PROJECT EXPERIENCE

Plymouth Main Fire Station, Plymouth, MA

Evaluation of waterproofing, roofing and walls; project included storm water run off management, site drainage and MEP evaluations

CT-DCS, Hartford Regional Center, Hartford, CT

Provided CT Building Code design review for exterior building renovations; review included wind, drainage, thermal, and mechanical equipment safety railings for roof replacement; additional review performed related to requirements for special inspections for structural augmentation and roof deck replacement

Millipore Complex, Jaffrey, NH

Evaluation of existing gravel surfaced built-up roof including associated rising wall flashings, and an Infrared Survey to provide an opinion on remedial options to mitigate on-going moisture infiltration/condensation below the roof

Attleboro Public Library, Attleboro, MA

Exterior enclosure evaluation of the historic public library including low-slope roofs, slate roof, stone and masonry facade and windows

Multiple Facilities, Winchester, MA

Egress evaluations for accessibility; design and construction monitoring of exterior ramps to comply with accessible entrance requirements

Stoughton Public Schools, Stoughton, MA

Review of classroom egress and accessibility paths at multiple schools; provided reports documenting compliance and recommended repairs and renovations to address building code and accessibility concerns

Town of Upton, MA

Evaluation, design and construction phase services for roof replacement at the Upton Police Station; limited roof replacement at the Upton Fire Station.

AFFILIATIONS

- American Institute of Architects (AIA)
- Construction Specification Institute Vice President 2012-2014, New England Region; Past President of Boston Chapter (2008-2012)
- Boston Society of Architects, Building Enclosure Council Co-Chair 2014-2016
- American Architectural Manufacturer's Association (AAMA)



EDUCATION

Syracuse University School of Architecture, Bachelor of Architecture

REGISTRATIONS AND CERTIFICATIONS

Registered Architect – NH #03970 (eight additional states)

National Council of Architectural Registration Board (NCARB Certified 64198)

CSI Certified Construction Documents Technologist (CDT)

Certified Building Official – State of Connecticut

Certification for School Project
Designers & Owner's Project Managers
(MCPPO)

Building Enclosure Commissioning Process Provider (BECxPSM)

Commissioning Authority + Building Enclosure (CxA+BESM)

OSHA 10-Hour Construction Course



Promised Land Survey, LLC Survey and Wetlands



Promised Land Survey, LLC

PO Box 447
Derry, New Hampshire 03038
Tel: (603) 432-2112
www.PromisedLandSurvey.com

Statement of Qualifications and Experience

Promised **L**and **S**urvey, LLC (PLS) was established in February of 1998. We founded our company with a desire to provide <u>professional land surveying services</u> throughout New Hampshire. Since inception, we have performed surveys in every county of New Hampshire, as well as every state in New England, and GPS/GIS work internationally. Timothy A. Peloquin, LLS, is founder and owner. Please visit our web-site to learn more about our company and our excellent personnel.

Of recent, PLS has engaged in many exciting projects, of which a short list includes:

- Exclusive on-call land surveying with Manchester-Boston Regional Airport (MHT);
- Multiple Cellular Tower Surveys (1A, Site Plans, Lease areas, As-Builts, etc.) throughout New England;
- Topography, Layout, and As-Built Survey/s for the US Army Corps of Engineers- Hampton, NH Jetty;
- Existing Conditions Survey for at Spur Rd Dam- Moose Brook, Lake Gloriette, Dixville Notch, NH;
- Interstate Route 393 topographic and detail survey for NHDOT;
- Topographic and detail survey at Chestnut Hill Rd & Spaulding Turnpike for NHDOT Maintenance Shed;
- Multiple Route/Road Municipal Engineering Surveys for many NH Towns, such as Derry, Chester, Salem, Londonderry, Atkinson, Exeter, Bedford, Litchfield, Henniker, Plymouth, Ashland, Wolfeboro, Moultonborough, Hinsdale, Lincoln, Newport, Sunapee, Claremont, Concord, etc.;
- Multiple Bridge Engineering Surveys, Layouts, and Easements in Newbury, Newport, Dover, Bradford, Washington, Pelham, Salem, Windham, Litchfield, Plymouth, Danville, Jaffrey, Holderness, Concord, Bedford, Bristol, Exeter, Errol, etc.!

Our staff at PLS includes Licensed Land Surveyors, Licensed Subsurface Designers, well trained CAD/GIS & Survey Technicians, and two plus full-time field crews, and are wide ranged in experience, education, and responsibilities. An abbreviated list of clients can be provided upon request and we'd encourage you to contact them as needed to assure our good reputation. Our full commitment is to excellence within our profession. We assure timely delivery, very competitive prices, and complete client satisfaction.

The primary contact at PLS is Timothy A. Peloquin, LLS. He is a graduate Civil Engineer (1985) and Licensed as a Land Surveyor in 1992, and passionately started Promised Land Survey, LLC in 1998. Mr. Peloquin has been very actively involved in National (ACSM/NSPS) and State (NHLSA) professional organizations, where he now serves as Past President. Of recent, Tim was nominated by the Governor of NH to serve on the Board of Land Surveyors. Additionally, he has enjoyed over many years "giving back" traveling to developing nations on an annual basis to help the less fortunate living in impoverished circumstances.

Thank you for your consideration of our company.

Respectfully,

Times A. Person

Timothy A. Peloquin, LLS; Promised Land Survey, LLC





PO Box 447, Derry, NH 03038 Tel: (603) 432-2112 www.PromisedLandSurvey.com

Professional Qualifications (abbreviated) of: Timothy A. Peloquin, LLS, Esq.

- respected Licensed Land Surveyor (LLS) performing work throughout New Hampshire for over 28 years;
- Also have performed work "beyond these borders" (international brochure available);
- Experienced in all levels of land survey components- historical, land law, research, field work, technology, computations/ CAD/ GIS, management, client/ public relations, etc.;
- Thorough knowledge and use of GPS equipment and associated computations and full integration with CAD (Carlson) and GIS (ESRI);
- Business owner- Promised Land Survey, LLC since February 1998;
- New Hampshire Land Surveyors Association (NHLSA)- active member since 1992
 Education Director 1995-1997, Executive Committee 2000-2003, President 2002, current Past-President;
- American Congress on Surveying and Mapping (ACSM)/ National Society of Professional Surveyors (NSPS)- active member since 1992;
- Surveying Education Foundation of New England, Inc. (SEFNE)- 2003 Vice-Chairman;
- Taught at University of New Hampshire (UNH)/ Thompson School of Applied Sciences Survey II (CT-233) 1999 & 2006;
- Appointed as Esq. to New Hampshire Board of Land Surveyors by Governor John E.
 Sununu in July of 2020;
- United States Coast Guard, Active Duty and Reserve 1982-1992- Honorable Discharge;
- Annual attendee at Trimble Dimensions Conference (GPS);
- Annual attendee at ESRI UC and Survey Summit Convention (GIS);
- Member of Derry Economic Development Commission 2019-present;
- Personal, yet deemed pertinent, happily married 33 plus years, 2 great children, active
 in the community and church, love the outdoors, travel, helping others, etc.

References are available upon request.

Updated last in October of 2020.



R.W. Gillespie & Associates, Inc. *Geotechnical Engineer*



SUMMARY OF QUALIFICATIONS

Since 1986, R. W. Gillespie & Associates, Inc. (RWG&A) has been committed to improving the quality of life in our communities in the built and natural environments. Our focus is to help clients develop projects of higher quality, better value and less risk through our services in geotechnical engineering, materials testing and inspection services, and environmental consulting. Offices in Biddeford, Maine, Newington, New Hampshire, and Mansfield, Massachusetts facilitate delivery of these services.

R.W. Gillespie & Associates, Inc. is a small, privately held corporation with the advantage to our clients being direct principal and associate involvement in technical projects. Our engineers have conducted numerous *geotechnical engineering studies* throughout New England and beyond. Projects have included low to high-rise buildings, utilities, multi-story parking structures, bridges, dams, highways, water and petroleum product tanks, transmission and communications towers, storage/transfer facilities, airports, and a stadium. Investigations have been conducted for both pre-development and post-development evaluations, correction of construction hazards, and for a wide array of structures and deep foundations including piles and drilled piers.

R. W. Gillespie & Associates offers essential *construction materials testing and building code special-inspection services* and other field and laboratory services for assuring and controlling project quality through selection, design, and installation of materials. Our company can provide structural compliance inspections to verify that the structural components of your project are constructed in accordance with the project plans and specifications. We have extensive experience working with standard reinforced, prestressed and post-tension concrete, reinforced masonry, and light & heavy-gage structural steel construction materials. We also offer SFRM and Firestop fireproofing special inspections.

Our Materials Testing group actively participates in Materials Laboratory reference certification programs with Cement and Concrete Reference Laboratories (CCRL) and The American Association of State Highway Transportation Officials (AASHTO). Our technology staff possesses numerous certifications from organizations including American Concrete Institute (ACI), Precast/Prestressed Concrete Institute (PCI), Northeast Transportation Training and Certification Program (NETTCP), and International Code Council (ICC). The materials testing laboratory is AASHTO R18 accredited.

RWG&A offers multiple *environmental consulting services* including Phase I environmental site assessments, monitoring groundwater quality at landfills for compliance with permits, and environmental analytical testing of soils. Environmental analytical testing services have included hazardous waste characterizations of Department of Defense facilities grounds for planning and budgeting offsite disposal and construction worker safety considerations.

R.W. Gillespie & Associates, Inc.

MARC R. GRENIER, P.E.

Vice President Senior Geotechnical Engineer

REGISTERED PROFESSIONAL ENGINEER:

Maine New Hampshire Connecticut Vermont

PROFESSIONAL MEMBERSHIPS:

American Society of Civil Engineers, Member International Society for Soil Mechanics and Foundation Engineering

EDUCATION:

University of New Hampshire, B.S., 1996 (Civil Engineering) University of New Hampshire, M.S. (Geotechnical Engineering), ongoing

GENERAL BACKGROUND:

Mr. Grenier is a Geotechnical Engineer supporting our Chief and Principal Engineers on a variety of geotechnical projects. Mr. Grenier's project contributions have included in-field geotechnical assessment and observation, and exploration and sampling of test borings and test pits for geotechnical pre-construction engineering analyses and design. He performs project tasks such as collection of soil samples, determination of in-situ strength of cohesive soils, and performance of laboratory consolidation testing. Mr. Grenier's duties also include the assignment of laboratory testing necessary for geotechnical evaluation of project sites, along with geotechnical engineering analyses, including settlement evaluations and deep foundations, and design and technical report preparation. Projects on which he has prepared design and technical reports include, but are not limited to, utility projects, airports, retail developments, hospital additions, schools, self-supported and guyed towers, municipal buildings, and marine research facility. Mr. Grenier also performs construction monitoring duties such as observation of pile driving, removal and replacement of unsuitable foundation bearing material, and installation and proof-testing of rock anchors.

Prior to joining RWG&A, Mr. Grenier held the position of Project Engineer at a geotechnical engineering firm in Georgia. While there, he worked on a variety of projects providing both geotechnical design and construction observation services. Design project tasks included subsurface soil stratification, collection of soil samples, geotechnical engineering analyses, and design and technical report preparation. Construction observation services included observation of deep foundation installation including driven and auger cast piles, monitoring of pile load tests, shallow foundation and slab/pavement subgrade inspections, subgrade stabilization, construction monitoring for Category I (High Hazard) and Category II earthen dams, both new construction and dam rehabilitation, observation of installation of soil nails and associated shotcrete placement, and construction monitoring of rock drilling and blasting. Mr. Grenier also performed Phase I environmental site assessments, pavement design, and design and evaluation of modular block retaining walls.

R.W. Gillespie & Associates, Inc.

REPRESENTATIVE EXPERIENCE:

Greenland Meadows - Greenland, New Hampshire - Performed geotechnical design services for a new 600,000 square foot retail facility. Design services included monitoring of test pits and test borings, field infiltration testing, and technical report preparation. Construction phase services included pre-blast surveys, foundation subgrade observation, settlement platform measurements and evaluation, and observation of porous asphalt placement.

Tweed International Airport - New Haven, Connecticut - Performed geotechnical design services for new safety areas and wetland mitigation sites. Design services included monitoring of test borings, field CBR testing, coordination with airport personnel, and technical report preparation.

University of New Hampshire, New Residence and Dining Halls - Durham, New Hampshire

- Performed construction observation and coordinated materials testing services for a six story Residence Hall and five story Dining Hall. Services included monitoring of driven piles, observation of removal of unsuitable soils, rock excavation, installation of steel sheet piles, rock anchors, and minipiles, and coordination of materials testing, including concrete, steel, soil, and weld inspections.

Center for Disease Control, Lab Building 103 - Chamblee, Georgia - Performed construction observation and coordinated materials testing services for a five story lab building. Services included observation of more than 400 auger cast piles, performed four pile load tests, evaluated shallow foundation subgrades, coordinated concrete, steel, and soil testing at a secure site, and managed the materials testing budget.

Edie Creek Dam - Barnesville, Georgia - Performed construction observation for the rehabilitation of a 2400 foot long, 35-foot tall Category II Dam damaged during the 1994 floods. Observation included foundation and fill subgrade evaluation, installation of toe, blanket, and chimney drains, placement of gabion wall and reno mattress spillway, installation of slurry cutoff wall, and rehabilitation of breach area which occurred during construction.

Fulton County Stockade - Atlanta, Georgia - Performed geotechnical design services for several multi story prison structures, including two eight story towers. Design services included several alternative foundation designs, deep foundation and settlement analyses, coordination of drilling at a secure site, client meetings, and temporary underpinning analysis.

R.W. Gillespie & Associates, Inc.

DANIEL E. BURGESS, E.I.T.

Geotechnical Engineer

EDUCATION:

University of Maine, Orono, Maine, B.S. Civil Engineering, May 2018

GENERAL BACKGROUND:

Mr. Burgess supports our Geotechnical Engineering team with contributions in field explorations, engineering analysis, and geotechnical observations during construction. In the field, Dan's responsibilities include implementing exploration programs, coordinating subcontractor activities, logging and sampling soil borings, rock corings, and test pit excavations; in-situ testing, and assisting with geophysical investigations. In support of geotechnical engineering analysis, he interprets and evaluates field data, selects and coordinates laboratory testing, assesses and evaluates soil bearing capacity and settlement, rock quality, and prepares technical reports and recommendations.

While attending the University of Maine Orono, Mr. Burgess took a graduate-level course called Geostructures II, which required him to evaluate earth retention walls and global slope stability in an urban setting. His coursework required hands-on involvement from the design phase to the construction phase. Mr. Burgess also worked as a research assistant for the Advanced Structures and Composites Center at the University of Maine where he was responsible for performing materials testing and for producing written reports for project managers.

REPRESENTATIVE EXPERIENCE:

Mr. Burgess worked as a Transportation Aide for the Maine Department of Transportation (Maine DOT) Regions 1 & 4 for four summer construction seasons, from May 2014 until August 2017. His responsibilities included inspections of sub- and fine-grades, drainage, and paving.

During his first two construction seasons with the Maine DOT, Mr. Burgess worked on the River Road full depth reclamation project in Windham, Maine, which consisted of heavy site clearing, drainage, sub-grade changes, and a final Foamed Asphalt process. Mr. Burgess also worked as an interim resident on a Maine DOT highway project in Old Town, Maine, supervising the planning, coordination and implementation of construction.

From January 2018 until May 2018, Mr. Burgess collaborated with a team of five other engineers in order to evaluate subsurface, foundation and pre-load information of a Recreation Center for the City of Portland, Maine. He compiled the data findings and prepared a client recommendation report for this Capstone project.

ALSO OF NOTE:

AutoCAD Civil 3D, MatLab, Microstation, Settle 3D, Slide 2018, HecRas, ReSSA



Vanasse & Associates, Inc. *Traffic Planning and Engineering*

VANASSE & ASSOCIATES, INC. CORPORATE QUALIFICATIONS

Vanasse & Associates, Inc. (VAI) is a New England based Transportation Planning and Engineering firm specializing in state and local permitting of private development projects and providing transportation services to cities and towns. Our expertise includes traffic impact analysis, transportation planning, traffic engineering, roadway design, traffic signal design, construction services, and expert witness court testimony. Today's complex and challenging projects require a team-based approach applying our technical expertise, process knowledge and extensive interface between clients, municipalities and state agencies as we lead our clients through the permitting process. Our goal at VAI is to efficiently move through project approvals and balance the needs of our clients, the communities, and the environment, while challenging our staff to grow and share with our success.

SERVICES

Transportation Planning

VAI provides a full complement of Transportation Planning services for public and private sector clients. These include: traffic studies; feasibility studies; environmental impact reports; peer review services; parking supply and demand studies; roadway, intersection and pedestrian safety studies; access planning studies; and transportation master plans. Our clients include state and municipal agencies, real estate owners and developers, attorneys, medical and educational institutions, and sporting and event facility owners and managers.

Transportation Impact Assessments

One of the most challenging aspects of Land Development projects today is understanding and addressing community concerns as they relate to traffic impacts, safety and congestion, in addition to non-motorized modes of travel such as pedestrians and bicyclists. VAI's professional and unbiased reputation with municipalities and state agencies, developers and land use attorneys, allows our engineers to work on some of the most challenging projects in New England. VAI understands that traffic studies must start with sound engineering principles, address community concerns with cost effective and implementable mitigation strategies, and must be presented to municipal boards, permit granting authorities and state agencies in an effective, clear and concise manner to gain support and community consensus. VAI has successfully permitted over 4,000 development projects through the New England Region ranging from small residential subdivisions to mixed-use and transit oriented development projects of over two million square feet in both urban and suburban settings.

Traffic Feasibility and Sizing Studies

Given the limited availability of land in New England and the challenging and complex traffic issues facing land development projects, developers are frequently engaging VAI early in the development phase to assist in properly sizing projects and developing permitting strategies. An early understanding of site access requirements, potential off-site improvements and costs, community concerns and an assessment of alternative development scenarios assists the development team to formulate permitting strategies early in the site assessment phase and serves to streamline the permitting process for the project. VAI has assisted developers in sizing many commercial and mixed-use projects allowing for optimal site development and the successful integration of projects into a community.



Environmental Impact Reports

VAI's engineers have assisted in providing comprehensive transportation analyses associated with Environmental Impact Reports/Environmental Assessments as required by state and federal agencies, either as the lead consultant or as a part of a development team. VAI has successfully completed numerous Environmental Impact Reports for private development projects throughout the New England Region. Our staff has a thorough and applied understanding of the Massachusetts Environmental Policy Act (MEPA) thresholds, implementing regulations and the associated permitting process.

Peer Review Services

VAI has been retained by numerous communities, town boards, private citizen groups and developers to provide our technical expertise to better understand a project's impact on the transportation infrastructure. Our reviews include a comprehensive assessment of the analysis methodology with regard to accepted Traffic Engineering and Transportation Planning practices, state and municipal standards and codes; roadway and intersection operations; access design and site circulation; safety; pedestrian and bicycle considerations; truck impacts; parking supply, demand and layout; and off-site improvement strategies. The goal of the review is to provide our clients with a better understanding of a project's impact and to assist in developing strategies that are designed to accommodate the project in a safe and efficient manner, while minimizing impacts to abutting properties, neighborhoods and all roadway users.

Traffic / Highway Engineering

Highway and Roadway Design

VAI provides a full range of civil engineering services including corridor planning and feasibility studies, design and permit acquisition, right-of-way documentation, construction contract packaging and construction administration and observation. Our clients include municipalities, state agencies and private interests with projects ranging from local streets and intersections to major corridor and highway interchange improvements throughout New England. VAI's engineering and design experience involves the preparation of construction documents including horizontal and vertical geometry; drainage and stormwater management; grading; utility systems; pavement marking and signing; traffic signal systems; traffic management; construction sequencing; construction specifications; and quantity and cost estimating.

Traffic Signal Design

VAI's expertise in the specialized field of traffic signal design offers our clients a technical and technological resource. The design of an isolated traffic signal or a system of traffic signals begins with determining the need for the signal. This need can be the result of an existing capacity or safety concern, one that is created as a result of new development, or as part of a corridor improvement project. VAI's traffic engineers have a thorough understanding of state and federal design guidelines and standards, including the Manual on Uniform Traffic Control Devices (MUTCD) and Highway Capacity Manual (HCM), which are integral to the design and installation of traffic signal systems. This expertise is used in determining the need for traffic signals, and in developing signal layout, sequence and timing plans for an isolated signal or for a coordinated network of intersections. VAI considers all aspects of design when evaluating traffic signal systems, including the various users of the roadways (vehicles, bicycles, pedestrians), peak hours, event conditions, safety, and aesthetics. State of the art computer models assess traffic operations and use animation to assess pre- and post-signal installation conditions to support proposed designs and to illustrate existing and proposed conditions to the client, state and municipal staff, and to the public.



Construction Services

As part of the firm's comprehensive engineering services, VAI offers construction administration and observation services for highway, roadway and intersection improvement projects. This work is typically part of our total services and is contracted separately to both public and private sector clients. VAI's construction services include contract documents, pre-bid conferences, bid evaluation, shop drawing review, RFI response, on-site construction observation, pay requisition review, final inspections, punch list review, and project closeout reporting. The firm's inspectors are Registered Professional engineers and NICET certified.

Expert Testimony

VAI offers expert witness services in issues relating to transportation, land development, roadway/intersection safety, motor vehicle crash analysis, and site design. Expert testimony services offered by VAI include depositions, affidavits, court testimony and support services. VAI's principals are qualified in the Superior, Land Court and Court of Common Pleas systems. They have rendered expert testimony before the courts, public boards, cities, towns, state and federal government agencies, and U.S. Senate Subcommittees on issues ranging in complexity from civil zoning and accident cases, to criminal proceedings for vehicular homicides.



Jeffrey S. Dirk, P.E., PTOE, FITE - Managing Partner

Traffic Engineer and Transportation Planner

Education:

University of Massachusetts, Amherst, B.S.C.E. with honors, 1991

Professional Registrations:

Registered Professional Engineer: CT #21868, MA #38871, ME #9163, NH #9822, RI #7112 and VA #39890

Professional Certifications:

Professional Traffic Operations Engineer (PTOE) #993
National Council of Examiners for Engineering and Surveying (NCEES) Record Holder
International Registry of Professional Engineers by the United States Council for International Engineering Practice (USCIEP)



SUMMARY OF EXPERIENCE

Mr. Dirk is a Partner and a Senior Project Manager at Vanasse & Associates, Inc. with over 29-years of experience in the fields of Traffic Engineering, Transportation Planning and Expert Witness Testimony. He is a Fellow of the Institute of Transportation Engineers (FITE) and is a Registered Professional Engineer (P.E.) in the states of Connecticut, Massachusetts, Maine, New Hampshire, Rhode Island, and Virginia, and has been Certified as a Professional Traffic Operations Engineer (PTOE) by the Transportation Professional Certification Board, an affiliate of the Institute of Transportation Engineers (ITE). His responsibilities include the design and analysis of roadway, intersection, and interchange systems, and pedestrian and bicycle facilities, and the preparation and review of traffic impact studies, roadway and intersection design plans, and safety assessments for private and municipal clients.

Mr. Dirk has a wide range of experience in the fields of Traffic Engineering and Transportation Planning. Traffic impact studies have included performing trip-generation calculations for large and small scale developments including mixed-use and transit-oriented projects in urban and suburban settings; traffic modeling and analyses; parking demand calculations; trip distribution and origin-destination studies; the development of Transportation Demand Management (TDM) strategies; traffic and parking management plans for sporting and event facilities; traffic calming measures; and project access and off-site improvement strategies. He has extensive experience in the design, analysis and modeling of roadways and signalized and unsignalized intersections, including the design and timing of coordinated traffic signal systems.

Mr. Dirk has prepared detailed design specifications, contract documents, and plans for roadways, intersections, traffic signals, and pedestrian and bicycle facilities for state and municipal clients including the Massachusetts Department of Transportation (MassDOT) and the Departments of Transportation in California (CALTRANS), Maine, New Hampshire and Rhode Island. Mr. Dirk has also been qualified as an Expert Witness in the fields of Traffic Engineering, Transportation Planning and Roadway/Intersection Safety in the states of Connecticut, Massachusetts, New Hampshire and Rhode Island, and has represented private and municipal clients in testimony and presentations before local, state and federal agencies, municipal officials, and courts of law. He has also been approved by the Massachusetts Gaming Commission to provide Traffic Engineering Services to gaming establishments and impacted communities in Massachusetts.

EXPERIENCE

Mr. Dirk's experience in the Traffic Engineering and Transportation Planning fields include the following:

Peer Review Services – Mr. Dirk has assisted numerous municipalities including, but not limited to, the following Towns of Billerica, Chelmsford, Foxborough, Gloucester, Groton, Halifax, Hingham, Milton, North Attleborough, Norwell, Pembroke, Plainville, Plymouth, Salisbury, Sandwich, Scituate, Sharon, West Bridgewater, Wrentham, Massachusetts; the Cities of Amesbury, Boston, Framingham, Newton, Quincy, Revere, and Waltham, Massachusetts; and the Towns of Greenland, Hampton and Plaistow, New Hampshire; in the review of traffic impact studies, parking assessments and transportation infrastructure improvements.

Traffic Signal Design - Supervised, designed, and managed the preparation of traffic signal layout, timing and coordination plans, and specifications and estimates for traffic signal installations on Route 20 in Millbury, Auburn, and Worcester, MA; Route 12 in Auburn, MA; Route 28 in Brockton, MA; Commonwealth Avenue in Newton, MA; Hamilton Street and Washington Street in Leominster, MA; Route 1 in Attleboro, MA; Route 126 in Ashland, MA; and Quinsigamond Avenue, Southbridge Street, Main Street, and Pleasant Street in Worcester, MA.



Pedestrian and Bicycle Facilities – Managed the planning, design and route selection for pedestrian and bicycle facilities, golf cart crossings and trail networks for municipalities and private developers in MA and NH, including the design and installation of pedestrian hybrid beacons (HAWK signals). Developed warrants for, evaluated and designed locations for the installation of audible pedestrian devices as aids to the visually impaired at signalized intersections.

Traffic Impact Studies - Managed and prepared traffic impact studies for small and large developments in urban and suburban environments including institutional and community transportation master plans. Recently completed and on-going projects include the following:

Encore Everett Resort, Everett, MA – Redevelopment of a former chemical manufacturing facility and brownfields site located on the Mystic River in Everett, Massachusetts, to accommodate the Encore Everett Resort, a luxury resort that will include a hotel with 629 rooms, a gaming area, retail space, food and beverage outlets, convention and meeting space, a spa and gym, and other complementary amenities. In addition, the resort includes extensive landscape and open space amenities including a public gathering area with an outdoor park-like open space, a pavilion, waterfront features, a public harborwalk, and water transportation docking facilities. Central to the planning of the project was the development of a comprehensive, multi-modal approach to integrate the project into existing and expanded transportation services, including roadway, intersection and traffic control improvements; bus, subway, commuter rail and water shuttle access and capacity enhancements; pedestrian and bicycle facility improvements; and traffic and parking demand management strategies, including the development of a transportation monitoring program to measure and mitigate the actual traffic and parking demands of the resort.

Patriot Place, Foxborough, MA - Approximately 1.3 million sf of commercial, recreational, office and medical office space, including the first Bass Pro-Shops outdoor retail store in the northeast, located adjacent to Gillette Stadium, home to the New England Patriots football team, the New England Revolution soccer team and concert and entertainment venue. This project entailed multiple challenges unique to the creation of a vibrant commercial facility proximate to a 68,000 seat stadium surrounded by over 14,000 parking spaces and bounded by a four-lane state highway, an active rail line and seasonal commuter rail station, and wetland areas.

The Hub at Causeway, Boston, MA - Planning and design of a mixed-use, transit-oriented development on the site of the former Boston Garden located at 80 Causeway Street in Boston, MA, to consist of a hotel, flex office space; retail/restaurant space, including a neighborhood grocery store; expansion of the TD Garden to accommodate expanded concession and elevator lobbies; and Champions Row, a new entrance to the North Station commuter rail station. In addition, the existing headhouse to the MBTA Orange Line and Green Line portion of North Station was integrated into the development. Central to the planning of the project was integrating the development into northern hub of the commuter rail system at North Station, which serves approximately 10,000 transit riders during peak commuter periods and includes one of the busiest Hubway bicycle sharing stations in Boston, as well as sporting events, concerts and entertainment at the TD Garden. Transportation planning for the development included pedestrian and bicycle connections, parking management and accommodations for service and loading.

Waterfront Square at Revere Beach, Revere, MA – Transforming existing Massachusetts Bay Transportation Authority (MBTA) commuter parking facilities serving Wonderland Station on the MBTA's Blue Line subway system, Revere Beach and the Wonderland dog track into a mixed-use, transit-oriented development consisting of a 902-unit residential community; 28,500 sf of retail space; 145,350 sf of office space; a 100-room hotel; and on-site structured parking for approximately 1,087 vehicles; to be situated on an 8.77± acre parcel of land located adjacent to Wonderland Station in Revere, Massachusetts. The project also featured the construction of two parking garages to serve Wonderland station and the reconfiguration and improvement of the busway and pedestrian and bicycle connections to and within the Station. Key to project development included integrating the development into available public transportation options and pedestrian and bicycle amenities through physical connections and inducements by way of an effective TDM program for residents, employees and hotel guests to reflect the transit-oriented nature of the project.

The Pinehills, Plymouth, MA – An approximate 3,000 acre planned use development (PUD) consisting of 1,897 limited occupancy homes; 920 planned retirement homes; four 18-hole golf courses; and 1.3 million of of commercial retail/office space. Major goals of the project included the development of a transportation system that would adequately serve the needs of the community while balancing the desire of the developer and the Town to maintain the rural character of the existing roadways, the project site and adjacent properties.

Affiliations:

Institute of Transportation Engineers
Past President, New England Section
Member, Traffic Engineering Council
Boston Society of Civil Engineers
National Society of Professional Engineers

Massachusetts Society of Professional Engineers
Member, Ethics & Registration and Certification
Committee
University of Massachusetts, Amherst
Member, Advisory Council, Department of Civil and
Environmental Engineering



Stephen M. Boudreau, P.E. – Partner Transportation Engineer/ Director, Highway Engineering

Education:

Northeastern University, B.S.C.E., 1985

Professional Registrations:

Registered Professional Engineer: MA # 36136, VT # 6849



SUMMARY OF EXPERIENCE

Mr. Boudreau is a Partner and Director of Highway Engineering at Vanasse & Associates, Inc. (VAI) with over 34 years of experience in Transportation Planning and Engineering Design. As a Partner of the firm, Mr. Boudreau is responsible for project management, business development, client maintenance and office management duties overseeing the highway engineering staff. He is responsible for all project contractual, administrative, technical and financial matters, including management oversight, client coordination and quality control/assurance for all on-going projects. His project involvement has also included multi-agency coordination and public liaison efforts necessary to attain consensus on project design, environmental and aesthetic concerns.

In his role as Director of Highway Engineering, he has provided management and technical guidance for projects throughout the New England area, ranging in size and complexity from intersection reconstruction and traffic signalization to major corridor widening and highway interchange modifications; historic parkways and recreational access roads; multi-use trails and facilities; commuter rail stations and airport ground access and landside transportation facilities. Directly involved in the oversight of all highway projects, he is responsible for quality control and project development to ensure that construction documents, including plans, specifications and cost estimates are prepared in conformance with the governing municipal, state and federal guidelines and regulations.

Mr. Boudreau has prepared detailed design specifications, contract documents, and plans for roadways, intersections, traffic signals, and pedestrian and bicycle facilities for municipal and state clients including the Massachusetts Department of Transportation (MassDOT), Massachusetts Port Authority (Massport), Massachusetts Department of Conservation and Recreation (DCR), New Hampshire Department of Transportation (NHDOT) and the State Transportation Departments for Vermont (VTRANS) and Rhode Island (RIDOT).

Representative Projects:

Route 28, Route 3A & Gold Street, Manchester, NH — As Part of the off-site improvements associated with the Walmart Development, VAI prepared the design for a cumulative 4,500' of roadway and sidewalk to accommodate turning lanes, two proposed traffic signals and associated geometric improvements at four locations. Project required permitting review and approval by NHDOT and the City of Manchester.

Route 1 Seabrook, NH – As part of the off-site improvements associated with the Waterstone retail development, VAI prepared the design of 1,200' of State highway and sidewalk to accommodate turning lanes, bicycle lanes and a proposed traffic signal. Project required permitting review and approval by NHDOT and the Town of Seabrook.

Mammoth Road (Route 128) and Nashua Road (Route 102), Londonderry, NH. Traffic engineering, highway design and construction services for roadway and intersection improvements at Mammoth Road and Nashua Road associated with the development of a new Walgreen's in Londonderry, NH. The work involved the widening of approximately 1300 feet of Mammoth Road to accommodate a new turn lane; approximately 1500 feet of widening on Nashua Road at Mammoth Road to accommodate new turn lanes; new sidewalks and pedestrian crossings; and traffic signal modifications. Engineering analysis and design included traffic counts and analysis, impacts assessment, and preparation of preliminary design and final construction documents (plans, specifications and cost estimates) for roadway geometry, traffic signal timing and phasing; drainage and utility system modifications; sidewalks and wheelchair ramps in conformance with ADA/AAB standards; pavement markings and signing; and traffic management plan. Construction services included preparation and attendance at preconstruction meeting, response to contractor questions and requests for information, review of shop drawings, on-site observation, coordination with adjacent contractors for utility and site work.



South Broadway (Route 28)/Hampshire Road/Lawrence Road, Salem, NH. Traffic engineering, highway design and construction services for roadway and intersection improvements at South Broadway/Hampshire Road and Lawrence Road associated with the development of a new CVS in Salem, NH. The work involved the widening of approximately 600 feet of South Broadway to accommodate new turn lanes; approximately 500 feet of widening on Hampshire Road to accommodate new turn lanes; new sidewalks and pedestrian crossings; and traffic signal modifications. Engineering analysis and design included traffic counts and analysis, impacts assessment, and preparation of preliminary design and final construction documents (plans, specifications and cost estimates) for roadway geometry, traffic signal layout, timing and phasing; drainage and utility system modifications; sidewalks and wheelchair ramps in conformance with ADA/AAB standards; pavement markings and signing; and traffic management plan. Construction services included preparation and attendance at preconstruction meeting, response to contractor questions and requests for information, review of shop drawings, on-site observation, coordination with adjacent contractors for utility and site work.

Route 3/Route 28, Hooksett, NH. Traffic engineering, highway design and construction services for roadway and intersection improvements at Route 3/Route 28 associated with the development of a new retail plaza in Hooksett, NH. The work involved the widening of approximately 800 feet of US Route 3 to accommodate new turn lanes; approximately 300 feet of widening on Benton Road for a new turn lane; new sidewalks and pedestrian crossings; and traffic signal modifications. Engineering analysis and design included traffic counts and analysis, impacts assessment, and preparation of preliminary design and final construction documents (plans, specifications and cost estimates) for roadway geometry, traffic signal layout, timing and phasing; drainage and utility system modifications; sidewalks and wheelchair ramps in conformance with ADA/AAB standards; pavement markings and signing; and traffic management plan. Construction services included preparation and attendance at preconstruction meeting, response to contractor questions and requests for information, review of shop drawings, on-site observation, coordination with adjacent contractors for utility and site work.

Washington Street Improvements at I-95/Route 128 Northbound Ramps, Woburn, MA VAI is providing engineering and design services for the Phase II roadway and intersection improvements on Washington Street associated with a proposed mixed use development located at 369 Washington Street in Woburn, MA. The work includes the widening of approximately 1200 feet of Washington Street between the I-95/Route 128 Northbound Ramps and Dewey Avenue to accommodate a second left-turn lane on the Washington Street northbound approach to the I-95 NB Ramps; the addition of a left turn lane on the Washington Street northbound approach to Olympia Avenue; approximately 250 feet of widening on the I-95/Route 128 Northbound Ramps to accommodate two departing lanes; and ramp approach to Washington Street will be widened to accommodate additional queue storage for the through and left-turn movements. Improvements also include the replacement of the existing traffic signals at the Washington Street/I-95 NB Ramps/Tower Park Drive and Washington Street/Olympia Avenue intersections, reconstruction of sidewalks and wheelchair ramps for ADA compliance, 5-foot shoulders for bicycle access, signing and pavement markings, and pavement milling and overlay.

VAI is preparing the preliminary through final design documents (plans, specifications and cost estimate) in accordance with MassDOT and Federal design guidelines and standards, including the preparation of the State Highway Access Permit application for MassDOT review and approval. The design effort includes the preparation of an FHWA Project Framework Document and construction drawings for roadway geometry (plan and profile); drainage system modifications; traffic signals; new guard rail, and sidewalks and wheelchair ramps in conformance with ADA/AAB standards.

Other representative projects include:

- Route 20/27/126 intersection and traffic signal improvements in Wayland, MA.
- Route 2A/110 intersection and traffic signal in Littleton, MA
- Winter Street corridor widening, intersection and traffic signal improvements in Waltham, MA.
- Route 3A/139 intersection and traffic signal improvements in Marshfield, MA.
- Route 53 corridor widening in Hingham in MA.
- Beals Street corridor and pedestrian access improvements in Hingham, MA.

Affiliations

Institute of Transportation Engineers American Society of Civil Engineers Boston Society of Civil Engineers American Council of Engineering Companies



Bernard Guen

Senior Transportation Engineer

Education

Northeastern University, B.S.C.E., 1981

Affiliations

Institute of Transportation Engineers (ITE)



SUMMARY OF EXPERIENCE

Mr. Guen is a Senior Transportation Engineer at Vanasse & Associates, Inc. with over 38-years of experience in the fields of Traffic Engineering and Transportation Planning. His responsibilities include the design and analysis of roadway, intersection, and interchange systems, and pedestrian and bicycle facilities, and the preparation and review of traffic impact studies and roadway and intersection design plans for private and municipal clients.

Mr. Guen's experience in the fields of Traffic Engineering and Transportation Planning encompasses a wide range of duties. Traffic impact studies have included performing trip-generation calculations for large and small scale private developments including mixed-use and transit-oriented projects in urban and suburban settings; traffic modeling and analyses; parking demand calculations; trip distribution and origin-destination studies; and the development of Transportation Demand Management (TDM) strategies, traffic calming measures and project access and off-site improvement strategies. He has extensive experience in the design, analysis and modeling of roadways and signalized and unsignalized intersections, including the design and timing of coordinated traffic signal systems.

Representative Projects:

Encore Everett Resort, Everett, MA – This project involved the redevelopment of a former chemical manufacturing facility and brownfields site located on the Mystic River in Everett, MA, to accommodate the Encore Everett Resort, a luxury resort that will include a hotel with 629 rooms, a gaming area, retail space, food and beverage outlets, convention and meeting space, a spa and gym, and other complementary amenities. The project required a comprehensive, multi-modal approach to integrate the project into existing and expanded transportation services. The study area encompassed over 57 intersections and included local and regional bus services and pedestrian and bicycle facilities. Major elements of the work effort included development of the existing traffic networks, development and evaluation of proposed improvements at Wellington Circle, Santilli Circle and Sullivan Square, including alignment alternatives to address existing and projected future deficiencies.

Patriot Place, Foxborough, Massachusetts - This project entailed the development of approximately 1.3 million sf of commercial, recreational, office and medical office space, including the first Bass Pro-Shops outdoor retail store in the northeast, to be located adjacent to Gillette Stadium, home to the New England Patriots football team and the New England Revolution soccer team. The work effort included detailed traffic modeling and analyses of operating conditions both with and without an event at Gillette Stadium, inclusive of both vehicle and pedestrian access and circulation, at over 30 intersections, including the I-95/ Route 1 and I-495/Route 1 interchanges; the development of game day traffic, parking, and pedestrian management plans for the Route 1 corridor and within the stadium parking facilities; formulation of a comprehensive TDM program for both Stadium events and typical daily operations of both the Stadium (non-event) and the planned commercial center. This project entailed multiple challenges unique to the creation of a vibrant commercial facility proximate to a 68,000-seat stadium surrounded by over 14,000 parking spaces and bounded by a four-lane state highway, an active rail line and seasonal commuter rail station, and wetland areas.

The Pinehills, Plymouth, Massachusetts – This project involved the development of a 3,000 ± acre planned use development (PUD) consisting of 1,897 limited occupancy homes; 920 planned retirement homes; four 18-hole golf courses; and 1.3 million sf of commercial retail/office space. The study area encompassed 25 intersections and included Route 3 from the Kingston Town Line to the Bourne Town Line and all ramps and interchanges between these points. Major development goals of the project included the development of a transportation system that would adequately serve the needs of the community, while balancing the desires of the developer and the Town to maintain the rural character of the existing roadways, the project site and adjacent properties. The work effort included the development of a detailed Transportation Demand Management (TDM) program of the community; traffic calming measures to reduce vehicle travel speeds through the community and discourage cut-through traffic on residential roadways; design of off-site roadway improvements, including Route 3 interchange modifications, traffic signal installations, modern roundabout, and by-pass roadway design.



Waterfront Square at Revere Beach, Revere, Massachusetts – This project entailed the redevelopment of existing Massachusetts Bay Transportation Authority (MBTA) commuter parking facilities serving Wonderland Station on the MBTA's Blue Line subway system, Revere Beach and the Wonderland dog track. This mixed-use, transit-oriented development consisted of a 902-unit residential community; 28,500 sf of retail space; 145,350 sf of office space; a 100-room hotel; and on-site structured parking for approximately 1,087 vehicles; to be situated on an 8.77± acre parcel of land located adjacent to the MBTA's Wonderland Station in Revere, Massachusetts. The project also featured the construction of two parking garages to service Wonderland Station; reconfiguration and improvement of the busway and pedestrian and vehicle circulation improvements within the Station; and the construction and enhancement of pedestrian and bicycle connections to the project, Wonderland Station and Revere Beach, including a pedestrian and bicycle bridge over both Ocean Avenue and the MBTA subway line. The major elements of the work effort included: assessing current and projected parking demands and supply for the project, the MBTA and current and future development; evaluation of pedestrian and bicycle volumes, accessibility and safety; projecting traffic demands for the project integrating public transportation options and pedestrian and bicycle activity; determining transit and bus ridership and capacity; developing an effective TDM program for residents, employees and hotel guests; and designing a comprehensive transportation improvement program that reflected the transit-oriented nature of the project.

Corporate Mixed-Use (CMU) Zoning District, off Worcester Road, Framingham, MA - Mr. Guen has conducted an assessment of the proposed Corporate Mixed-Use (CMU) Zoning District to be located off Worcester Road (Route 9) and generally bounded by the Massachusetts Turnpike (I-90), a CSX rail line, and the Ashland and Southborough town lines, in Framingham, Massachusetts. The purpose of this assessment is to identify the potential impacts on the transportation infrastructure associated with the build-out of properties located within the proposed CMU Zoning District (I and II) and to define specific improvements that may be necessary to support the identified build-out, inclusive of expansion of pedestrian and bicycle accommodations and access to public transportation.

Chick-fil-A, Framingham, MA - Mr. Guen assisted in the analysis for an Transportation Impact Assessment (TIA) in order to determine the potential impacts on the transportation infrastructure associated with the proposed construction of a Chick-fil-A restaurant with a drive-through window facility to be located off Ring Road (a.k.a. Shoppers' World West Drive) and situated within the northern portion of the parking lot serving the Kohl's Plaza in Framingham, MA. This study evaluates the following specific areas as they relate to the Project: i) access requirements; ii) potential off-site improvements; and iii) safety considerations; and identifies and analyzes existing traffic conditions and future traffic conditions, both with and without the Project, along Cochituate Road (Route 30), Worcester Road (Route 9) and Ring Road, as well as at the following major intersections: Route 30 at Ring Road and Shoppers' World Way; Route 9 at Ring Road/retail plaza driveway; Ring Road at Ring Road Connector; Ring Road at the Kohl's Plaza north driveway/retail plaza driveway; Ring Road at the Kohl's Plaza driveway.

CVS Pharmacy, Concord Street (Route 126) at Hartford Street, Framingham, MA - This Project entailed the construction of a 15,195± square foot (sf) CVS/pharmacy® with a two-lane drive-up prescription facility to be located on the northwest corner of the intersection of Concord Street (Route 126) at Hartford Street in Framingham, MA. The Project site consists of approximately 1.92 ± acres of land bounded by Concord Street to the east; residential properties to the west; a gas station and town fire station to the north; and an automobile repair shop, residential properties and Lindbergh Road to the south.





StreetScan / streetlogix
Road Surface Asset

1.ABOUT US

At StreetScan, we come to work each day because we want to solve our clients' biggest problems when it comes to monitoring their street assets. We have a Smart City Mobile Sensing Service Offering targeted at providing clients with an intelligent, objective and affordable way to manage those assets.

Throughout the history of business, people have used data to make more informed decisions. StreetScan enables exactly this for our municipal clients.

Municipalities no longer have to send inspectors into the field for pavement surveys. Now, they can leverage the power of data to improve their decision-making abilities.

This all came about as a result of a 2009 groundbreaking project at Northeastern University that received more than \$18 million in funding over a 5-year period. This stamp of approval was due to the power of the project to end localized pavement inspections and enable continuous network-wide health monitoring of roadways.

What kind of technology made this possible? Versatile Onboard Traffic Embedded Roaming Sensors (VOTERS). A framework, prototype and blueprint were successfully designed and developed, and in 2015, StreetScan was launched as a spin-off of the project. It is our comprehensive, advanced hardware and software turn-key solution that distinguishes us from the competition. More importantly, it provides street asset monitoring at a reasonable cost for our clients.

2017 saw the emergence of our current Smart City Service Offering and we have combined this service with our pavement management offering. Clients save time, money and no longer require additional field surveys. Our ScanCars can enable municipalities and other clients to extract and monitor critical assets such as pavement condition, traffic signage, pavement markings, streetlights and other transportation infrastructure assets.

We embrace progress. In 2018, StreetScan launched Streetlogix. This extensively customizable, web-based GIS asset management software has changed the landscape for municipalities. Municipalities can now optimize their budget within a user-friendly GIS environment. The system provides objective information on the current state of their infrastructure and makes maintenance and repair recommendations, including the prioritization of roadway projects. Using unprecedented data visualization and budget optimization tools, our clients have been creating defensible data-driven Capital Improvement Plans while successfully justifying their budgeting requests.

The most important thing you need to know about StreetScan is our data-driven approach. It will change the way you monitor your street assets – for the better and for the future.





Powered by Al

2.OUR TEAM



Stanley Karlin – Manager, Sales & Marketing – As the Manager of Sales & Marketing at StreetScan, Stan brings over 25 years of experience in selling & marketing exclusively to the public sector. Stan came to StreetScan after selling his municipal software company where he served as the Chief Marketing Officer, and is eager to promote StreetScan's new technologies and solutions to local governments. He received his M.Ed. From Temple University in Instructional Design & has used this knowledge to help better explain complex solutions in marketing.



Rob Craig – Customer Success Manager, StreetScan – As primary point of contact, Rob brings his GIS and operations expertise to guide our municipal clients from project kickoff to delivery. He originally joined StreetScan as a field technician after completing his B.S. in Fisheries and Wildlife Science with a minor in GIS, and later became StreetScan's Operations Manager where he was responsible for all aspects of the pavement management collection. Prior to joining StreetScan, he worked on hyperspectral research with the University of Arizona at the Rocky Mountain Biological Laboratory, and as a tutor in GIS and Statistics. His interests include wildlife research, outdoor recreation, and green communities.



Charmaine Holloway – Operations Manager – Charmaine oversees data collection, data processing and result publishing for all our projects. She originally joined StreetScan as a QC Supervisor, where she led, trained and coached a team of specialists performing quality control on extracted features and assets to ensure accuracy. Charmaine has over 10 years' experience in the data collection field and has worked and volunteered for many organizations and universities collecting scientific data, including Environment Canada, the Ontario Ministry of Natural Resources and Forestry, and Esri. She holds a bachelor's degree in Science, Biology from the Memorial University of Newfoundland and has completed the GIS Application Specialist Program from Sir Sanford Fleming College.



Jim Esterbrook – Customer Success Manager, Streetlogix – Jim works closely with our customers from their onboarding of Streetlogix through the long term, ensuring they reach their goals for integrating asset management technologies to enhance their operations. Jim brings a diverse set of experience with over 16 years in the development and deployment of government and enterprise software solutions with focus on public works and asset management technologies. Jim has led and developed many GIS and asset management plans for cities and towns of all sizes. He is well versed in understanding customers' needs and goals to help tailor solutions that optimize their operations and workflows. Jim received his B.S. in GIS & Regional Planning from Salem State University and his Master of Public Administration from Anna Maria College.



Angie Stevens – Channel Sales Manager - Angie is responsible for developing and executing Streetlogix's Partnership Program. Her primary goal is to build relationships with partners and understand their needs. Angie provides project governance, customer on-boarding and enablement, and implements business strategies to drive and help the partners' customers realize the full potential of their investment. She has a long history in developing channel relationships to create wins for her organizations, its partners, and most importantly, its customers. Previously, Angie was a Channel Sales Manager at Cartegraph, as well as a Strategic Partner Account Manager at 360training and QuickStart.



3.THE STREETSCAN SYSTEM

StreetScan's automated data collection and algorithm-based roads prioritization software can help optimize your road budget and provide user-friendly analytics about the status of your roads and sidewalks.



Data Collection

StreetScan's vehicles equipped with multi-sensor systems detect pavement & sidewalk surface distresses without interrupting traffic flow.

Data Processing

Optimized algorithms evaluate and prioritize repairs of assets, including pavement, sidewalks, traffic signs, and more.

GIS Analytics

Collected data goes into Streetlogix, our unique cloud-based application, allowing municipalities to visualize and manage road assets in order to schedule maintenance within a user-friendly GIS environment.





4. STREETLOGIX SOFTWARE

4.1 ASSET MANAGEMENT SOFTWARE

Streetlogix's **Asset Management Module** is a cloud-based mapping, analysis, and decision-making tool for the public sector. Use it to create maps, analyze data and plan road repairs, sidewalk projects, traffic signs and right-of-way budgeting decisions. Your data and maps are stored in a secure and private infrastructure and can be configured to meet your mapping and IT requirements.

Transportation Management Key Features:



MAPPING & REPORTING



BUDGETING



SOFTWARE INTEGRATION







Section 4Firm's Relative Experience



60 Newbury Street



Multiple Assignments

Gale performed site evaluations, needs assessments, planning, design, and permitting for renovations to various public facilities throughout the City. Gale's On-Call Term Contract included site plan peer review for the Planning Department.

THE PROJECT

- 60 Newbury Street peer review of a 16-unit residential development; included review of MEPA ENF, Conservation Order of Conditions, site plan review, review of stormwater, and zoning variance requests; challenges included work within a waterway that required a Chapter 91 license and advanced water quality treatment for discharge to a shell fishery.
- 32 Gilson Road peer review of a 24-unit residential development; included review of stormwater, site plan, traffic turning movements, and zoning variance requests.
- Adams Park Complex Needs assessment, master plan for renovation, design improvements, and assistance with permitting and construction monitoring.
- Veterans Park Renovations for an MIAA compliant synthetic turf athletic field for soccer and football.
- Faxon Field Planning, design, permitting, and construction administration of a municipal track and field complex.



Adams Park



32 Gilson Road

PROJECT INFORMATION

Location: Quincy, MA

Client:

City of Quincy Park Department Mr. Paul Franz (617) 592-6622

City of Quincy Planning Department Ms. Margaret Hoffman (617) 376-1378





Building 96 at Portsmouth Naval Shipyard



Naval Power Plant, Cutler, ME

PORTSMOUTH NAVAL SHIPYARD

Indefinite Delivery Contract

THE PROJECT

Gale has performed effectively and efficiently on IDIQ Term Contracts directly with the Portsmouth Naval Shipyard, and through a five-year IDIQ with MIDLANT. The focus of Gale's services has been on exterior building envelope weatherization and structural repairs, and site improvements. Representative projects under these term contracts include the following:

GALE'S SERVICES

- Cutler Power Plant Gale designed a complete overhaul of the facilities drainage system to include foundation drain replacement, foundation waterproofing, culvert analysis and replacement, and Low Impact Development (LID) techniques as required by the Navy; performed in-depth hydraulic analysis for culverts and swales that discharge to environmentally sensitive areas such as Machias Bay.
- Northern site surveys Full-scale survey and GIS data collection program at four sites equaling over 6,000 acres.
- Building 291 Site survey and utility improvements in conjunction with a 1,500 sf building addition.
- Building 115 Site survey and stormwater improvements.

PROJECT INFORMATION

Location: Kittery, ME

Client:

Department of the Navy Portsmouth Naval Shipyard Mr. David Hopper, AIA (207) 252-7901

"Gale Associates' commitment in providing high quality construction plans, specifications and accurate cost estimating was vital for the successful completion of this project"

- J.H. Wyeth, Facilities Division Head







VILLAGE HILL

Term Contract for On-Call Engineering and Construction Administration Services

THE PROJECT

Gale is currently in year eight of a Term Contract to provide planning, engineering, and construction administrative services for this 126-acre mixed use community. Village Hill combines residential living with commercial, retail, and light industrial uses. This planned development also features open space parks and a network of walking and biking trails. The incorporation of historical buildings and old growth vegetation is integral in the project's Low Impact Design efforts. Full build-out will include approximately 476,000 square feet of retail, commercial, and industrial development, as well as 350 residential homes and rental units. Recent projects include:

- Watershed analysis and stormwater management design and permitting.
- Rail Trail Improvements Design and permitting improvements of a portion of Northampton's walking and bike path system for Village Hill.
- Embankment Restoration The stabilization of a slope with grade changes of approximately 70 FT, to allow the development of 10 residential units.
- Ford Crossing, Village Hill Road, and Olander Drive Design and permitting for the extension of three on-site roadways at Village Hill.
- Hazardous Materials Administration of the removal and subsequent testing of potential hazardous materials at Village Hill.
- Master Planning- Feasibility, analysis, and cost estimating of MassDevelopment's current Master Plan, and various development alternatives at Village Hill.

PROJECT INFORMATION

Location: Northampton, MA

Client:

Mr. John Marc-Aurele, P.E. Director of Engineering (978) 784-2926



Reconstruction of Entrance Roads



Roof replacement

Accessible parking

MINUTEMAN REGIONAL VOCATIONAL TECHNICAL HIGH SCHOOL

Multiple Projects / Term Contract

THE PROJECT

Gale was engaged by the Minuteman Regional Vocational Technical High School (MRVT) to conduct a detailed site evaluation of various features on campus, specifically relating to site access roads, parking lots, sidewalks, pedestrian access, and overall aesthetics. Subsequently, Gale provided MRVT with design and construction period services for the roadway and plaza improvements, as well as design services for the newly proposed softball field.

NEEDS ASSESSMENT

At the request of MRVT, Gale performed a needs assessment report that included the identification of site constraints and existing conditions, a visual observation and evaluations, conceptual improvements, and associated cost estimates.

ROADWAY AND PLAZA IMPROVEMENTS

- The school acknowledged the poor conditions of numerous features on site and requested Gale to address the issues and provide an accessible, serviceable, functional, and aesthetically pleasing campus.
- Work included the installation of bituminous asphalt, roadway striping, reconstructed ADA parking, pedestrian access, sidewalks, landscaping, and various other improvements.

SOFTBALL FIELD IMPROVEMENTS

- Contract includes a site investigation, design, permitting, bidding, and construction period services.
- Proposed softball field improvements to include a reconstructed natural grass field, an irrigation system, ADA site access, utility work, and other various improvements.

ROOF REPLACEMENT

■ Boiler room roof replacement and associated work.

PROJECT INFORMATION

Location: Lexington, MA

Client:

Minuteman Regional Vocational Technical High School Mr. Kevin Mahoney Asst. Superintendent of Finance (781) 861-6500







CHARLES RIVER COMMUNITY HEALTH CENTER

Civil/Site Engineering and Design Services

THE PROJECT

Gale performed site planning, design, and permitting for a new 48,000 SF, two-story, LEED® Certified, Community Health Center in Brighton, MA.

GALE'S SERVICES

- Civil/site design, including complex layout, grading, stormwater management, utilities, and landscape plans.
- Design and layout of off-street parking for vehicles, using permeable pavement for stormwater management.
- Permitting effort included filing with the Boston Water and Sewer Commission, Massachusetts Water Resources Authority, Department of Conservation and Recreation, and Boston Public Improvements Commission.
- Assisted in the LEED® Certification process by determining the maximum number of LEED® points, document review and preparation, as well as various supporting calculations.

PROJECT INFORMATION

Location: Brighton, MA

Client: Isgenuity, LLC

Mr. Martin Batt, AIA, RIBA

(617) 419-4662



UNION POINT COMMUNITY

Multiple Projects / Term Contract

THE PROJECT

This 1,400-acre mixed-use development, formerly known as Southfield, is located at the former Weymouth Naval Air Base and contains residential neighborhoods, townhouses, apartments, office campuses, walking and biking paths, as well as other passive and active recreation areas.

GALE'S SERVICES

- Discovery and Endeavor Roadway Design: design and permitting of 2,000 LF of roadway and utility infrastructure to support the continual build out of Union Point's Technology District (Client: LStar Ventures).
- Site design and permitting of 36 residential townhome units, including layout, roadway profiles, drainage, and utility design (Client: IBG Homes).
- Stormwater analysis and design/permitting of a 50' x 8' concrete weir structure within a perennial stream; permitting included Local Conservation Commission, Army Corps of Engineers, Natural Heritage and DCR Office of Dam Safety (Client: Southfield Redevelopment Authority).
- Site plan peer review services for Brookfield Village, a 108-unit residential development; services included review of zoning and subdivision compliance, layout, grading, drainage, utilities, profiles, and sewer pump stations (Client: Southfield Redevelopment Authority).
- Design and permitting of a gravel parking lot adjacent to bordering vegetated wetlands, a vernal pool and perennial stream (Client: LStar Ventures).



Tacan drainage weir



Brookfield Village peer review

PROJECT INFORMATION

Location: Weymouth, MA

Client:

Southfield Redevelopment Authority Mr. Jim Young Land Use Administrator (781) 682-2187 ext. 102





Comprehensive Facility Needs Assessment

THE PROJECT

Gale was requested to perform a comprehensive facilities and program needs analysis of the 20-year old school to develop a facilities master plan and recommendations for future building and site improvements.

GALE'S SERVICES

- Performed a comprehensive evaluation of exterior envelope, including roof, windows, masonry walls, and doors.
- Observed destructive testing of select masonry wall systems to determine the cause of consistent vertical cracking in the building's masonry veneer.
- Prepared an in-depth evaluation report of the building's exterior facade and site conditions, including driveways and parking facilities, drainage and utilities, on-site septic system, walkways, and athletic facilities.
- Created AutoCAD drawings with defect locations, repair or replacement recommendations, conceptual layouts for site improvements, cost estimates and photographic documentation.



New aluminum roof system



Campus evaluation, including pavement surface

PROJECT INFORMATION

Location: Amherst, NH

Client:

Souhegan High School Mr. Jim Miner Director of Buildings and Grounds (603) 673-2690 ext. 111





Aerial view of completed development



Community pool

PEMBROKE WOODS RESIDENTIAL DEVELOPMENT

Site Engineering and Permitting Services

THE PROJECT

Gale Associates, Inc. was engaged by Trammell Crow Residential to provide site engineering and permitting services for a 240-unit apartment complex on a 50-acre site in Pembroke, MA.

GALE'S SERVICES

- As a result of the change in use, Gale was required to file a MEPA Notice of Project Change and amend several other state and local permits.
- Phase I was completed on time and within established budgets.
- Gale was responsible for the site layout, grading, drainage, wetlands replications, utilities, and onsite wastewater treatment.
- Gale coordinated the efforts of the Traffic Consultant, Vanasse Associates, and the Archeological Consultant, Timelines, Inc.
- Project was completed with significant public input and resulted in a locally approved "friendly" 40B Comprehensive Permit.

PROJECT INFORMATION

Location: Pembroke, MA

Client:

Mill Creek Residential Mr. David Lamason (203) 762-2854



Section 5 References



Town of Barrington, New Hampshire

Professional Engineering Services

REFERENCES

Town of Hillsborough, NH Ms. Robyn Payson Town Planner (603) 464-7971 Robyn@hillsboroughnh.net

Town of Chester, NH Mr. Michael Olsen Road Agent (603) 235-1842 M1Train@gsinet.net

Town of Norwell, MA
Mr. Glenn Ferguson
Director of Public Works
(617) 645-7710
gferguson@greenenvironmental.com



Section 6Firm Performance



Town of Barrington, New Hampshire

Professional Engineering Services

FIRM EXPEREINCE

Understanding of the Town's Needs

The Town of Barrington is becoming the most desired community within the southern New Hampshire area. Located along the NH Route 125 and NH Route 9 corridors, the



Town continues to steadily experience residential and commercial growth that allows the community to establish a rural life-style, while capitalizing on the surrounding employment and social opportunities. To support a growing community, a robust municipal infrastructure is necessary to sustain the transportation, recreational, utility, and environmental demands of the flourishing community. However, growing communities generally have limited staff and funds to provide the vast array of services required to manage, maintain, upgrade, and improve municipal infrastructure, while conducting other Town business. Assistance from an on-call engineering consultant will provide the technical resource on an as-needed basis to supplement the Town's capacity without overburdening financial budgets or a full-time town engineer employee. Gale has extensive municipal infrastructure experience that can be a valuable technical resource to the Barrington community. We also recognize that successful project completion is achieved by regarding the client's needs and objectives as our own. The Gale team strives to function as adjunct Town personnel by listening and thoroughly understanding project objectives. Constraints presented by budget, environmental issues, regulations, or the construction process can be successfully navigated by maintaining early and constant communication.

In addition to managing existing municipal infrastructure, growing communities like Barrington are also challenged to review and observe new residential and/or commercial development. A proper review of new development presented before the Town Planner and/or Planning Board by an experienced engineer can result in avoidance of future issues that may not manifest themselves right off, but can become the Town's problem later on. For example, improper drainage design of a new development can result in stormwater runoff being conveyed or allowed to discharge onto Town maintained roads. Then, when winter arrives, the improper management of the development's runoff becomes an icing problem for the Town to resolve. Gale has extensive experience supporting Land Use Departments, Community Development Departments, and Planning Boards. We have performed numerous application peer reviews ranging from a lot-line relocation, to a multi-lot subdivision, to a commercial development. Our peer review services can be as limited to the appraisal of the stormwater analysis, roadway design, traffic analysis, pedestrian safety, and/or erosion control. Or, as comprehensive to include Zoning Ordinance, Development Regulations, and overall good-engineering practices. Gale will listen to the Planning Board and providing an appropriate level of review so that the Board can make educational decisions.

Gale has extensive field experience to review construction activities. We check that the development progress is being performed in accordance with the approved plans. Gale collaborates with all parties to identify responsibilities from the initial pre-construction meeting to the final completion and as-built plan review.

Land Subdivision Regulations – Town of Hampstead New Hampshire

3. DRIVEWAY REGULATIONS

A. AUTHORITY

 Pursuant to the authority vested in the Hampstead Planning Board by the legislative body of Hampstead, and in accordance with the provisions of New Hampstike Revised Statutes Annotated (RSA) 674:25, Power to Regulate Subdivions and RSA 265:13, Driveways and Other Accesses to Public Way, and RSA 256:14, Penalty, as amended, the Hampstead Planning Board adopts the following Regulation governing residential driveways within the Town of Hampstead, NH.

2. These Regulations shall be known, and may be cited as, the "Town of Hampstead Driveway Regulations", hereinatter reterned to as "Driveway Regulations". These Regulations revise and replace any prior driveway regulations, as amended, and take effect upon adoption by the Planning Board and filing with the Town of Hampstead flown Clierk in accordance with RSA 675.6. A copy of these Regulations shall also be filled with the Hampstead, NH was afflicted with driveway issues for many years. As the Hampstead Town Engineer, Scott Bourcier was tasked to review the town's driveway regulations and provide opinions for the town's consideration. The revised Driveway Regulations are now part of the town's Subdivision Regulations.

As the Town Engineer for Hillsborough, one of Scott's primary task assignments for 2021 is assisting the Town Planner with updating the town's Site Plan and Subdivision Regulations.



Formal, Informal, and Emergency Support

Formal assistance develops out of a need to complete a project. Primarily, formal assistance is based on a specific project that has been identified by a Department or Municipal Board. This is very much standard practice between a community and a consultant.

In addition to formal assistance, communities also require (if not more so) informal and emergency support. *Informal* assistance develops out of the relationship between the municipality and the consultant. Gale understands that highway, parks and recreation, conservation, code enforcement, and waste management departments sometimes need a sounding board for ideas or concerns. Sometimes the department may need opinions from an engineer that a course of action will be in compliance with good engineering practice and regulations. Gale's Project

Director Scott Bourcier, PE, has developed strong relationships with communities that feel comfortable contact him via email or personal cell anytime (day, night, or weekends). Scott understands that the relationship with the Town is long-term and has provided informal support at no cost to the Town.

During disaster events, municipal staff need prompt *emergency* assistance. These events greatly impact not only the community, but also Town staff to quickly manage. Gale understands that a simple call for technical support provides helpful assistance and direction during times of turmoil. Again, Project Director Scott Bourcier, PE, is available day and night to support the Town should an emergency situation arise.



Outfall Slope Stability, Rockland, MA

Proximity to Barrington

Assistance will be provided from Gale's Bedford, NH office. The office is located approximately under 50 minutes and 44 miles from miles from the Town of Barrington.

Master Service Agreement

Gale prepares a mutually agreeable Master Service Agreement to manage multiple concurrent projects. The Master Service Agreement serves as the prime document for the Town to engage our services. It also establishes the general Scope of Services, Billable Rates, and Contractual Terms/Conditions. Once the Master Service Agreement has been executed by the Town, individual task orders (discussed below) are prepared on a project-by-project basis. Although this Master Service Agreement approach has worked for other municipalities, we are flexible and will work with Barrington to arrive at a mutually agreeable contract arrangement.



Task Orders

Gale provides a specific scope and fee task order for the Town's review / approval for each specific project assignment identified by the Town. Gale assigns each task order a separate and distinct internal project number for the purpose of tracking all staff-and expense-related charges to each specific project and task order. This allows Gale to provide services on multiple projects simultaneously, while maintaining separate cost accounting. Gale's Project Director will keep the associated Town contacts informed of the schedule until completion upon execution of each task order. Should questions arise during the project, Gale's Project Director is readily available to meet with Barrington staff on short notice to review and discuss. Gale recognizes the importance of detailed service and completion in a timely manner. Gale's team has the capability to respond to multiple task orders and to closely match required services with the expertise of our staff.



Invoices

Gale will submit invoices per the Town's directions. Invoices for projects where services are performed directly for the Town can be submitted to either a single-staff member, such as the Town Administrator or Finance Director, or directly to the respective Department for processing.

Invoices for projects for which services are performed on behalf of the Town can be submitted to either the Town or to third party (such as Planning Board applicants) for processing. If the Town directs Gale to submit invoices to a third party, Gale will prepare a task order consisting of a scope, fee, and reference to the Master Service Agreement. Gale will collect a retainer from the third party that will be identified within the scope. The retainer will be credited against the final invoice with remaining funds (if applicable) being returned to the third party. Services will not commence until a task order has been signed by the third party and a retainer has been received by Gale. The third party will receive monthly invoices from Gale until the scope of services has been completed. In the event invoices are not paid within 30 calendar days, Gale will immediately stop services, use the retainer to fund outstanding balances, notify the third party, and will not recommence services until all invoices have been paid in full and a second retainer has been collected. While there is no charge for submitting invoices directly to the third party, Gale requests the Town coordinate with Gale prior to closing a project (e.g., a road being accepted by the Town or a Certificate of Occupancy being approved), to confirm all services have been paid in full.

Town Relationship / Conflict of Interest

Gale recognizes that conflicts of interest can potentially occur when serving as a Town's Engineering Consultant. Gale will not enter into project agreements within the Town that could compromise or be in conflict with our professional responsibilities to the Town. Gale further acknowledges that we are aware of no personal, business, contractual, or other engagements, arrangements, or other dealings with any of the Town of Barrington's officers, employees, or business entities with which a Town officer or employee is affiliated, which would create a conflict of interest. An affidavit has been included in Section 8 of this qualifications.

Planning Board Peer Review

Gale has extensive experience supporting Land Use Departments, Community Development Departments, and Planning Boards. Gale is flexible to provide the appropriate level of peer review as directed by the Town. Reviews can be limited to an appraisal of the stormwater analysis, roadway design, traffic analysis, pedestrian safety, and/or erosion control. Or, as comprehensive to include Zoning Ordinance, Development Regulations, and overall goodengineering practices. Gale prides ourselves in listening to the Planning Board and providing an appropriate level of review so that the Board can make educational decisions.

Gale's typically peer services consisting of:

- A field inspection of proposed site
- Compliance assessment with zoning ordinance and development regulations
- Review of soils information with an emphasis on drainage and sewage disposal limitations
- Review of stormwater drainage and its impact upon adjacent properties
- Review of roadway design
- Review of utility layout and design
- Review of traffic and parking studies
- Review of sedimentation and erosion control plan
- Preparing a letter report summarizing our findings

If necessary, Gale is available to

- Prepare construction bond estimates
- Attend Technical Review Committee (TRC)/Department Head Review (DHR) meetings
- Attend Planning Board hearings



Gale has the experience and qualified staff to provide a detailed review of submissions with respect to:

- Submittal procedures and completeness
- Applicable Zoning Ordinances
- Applicable Overlay Districts
- Applicable development regulations
- Applicable federal and state regulations
- Environmental impacts (including wetlands and endangered species)
- Property boundary layout (including deed / easement data)
- Site layout
- Roadway design
- Intersection layout and design

- Traffic analysis
- ADA layout and design
- Parking layout
- Stormwater management analysis and design
- Utility layout and design
- Site grading and sedimentation/erosion control
- Landscape design
- Lighting
- Structural design
- Geotechnical design
- Architectural and Building Enclosure

Gale's approach is focused on:

- Effective and proactive communications
- Providing a single point of contact to coordinate delivery of services
- Dedication and continuity of knowledgeable staff
- Responsive service that meets the Town's schedule objectives

Planning Board Peer Review – Construction Phase Services

Gale has extensive field experience to review construction activities to assure development progress is being performed in accordance with the approved plans. Gale collaborates with all parties to identify responsibilities from the initial pre-construction meeting to the final completion and as-built plan review. Gale will convene a pre-construction meeting with the Contractor, Engineer-of-Record, and Town staff prior to commencing construction activities for development projects. Meeting minutes will be recorded and distribute all parties associated with the development. Topics of discussion during this meeting may include:

- Lines of communication and Points of contact
- Submittals
- Construction activities required to be observed
- Field changes

- Testing requirements and responsibilitiesConstruction milestonesConstruction schedule
- Miscellaneous items

Gale has developed a construction observation process that is based on scheduled site visits at key construction milestones. These milestones are recommended minimum at monitoring points that evaluate the progress of the proposed project. While additional milestones can be identified / requested by the Town (as deemed appropriate for each development project), Gale's recommended key construction milestones are:

- Clearing & Grubbing
- Embankment Subgrade and Drainage
- Roadway Base Gravel Courses
- Binder-Course Pavement (incl. preparing a const. bond)
- Project punch list
- Wearing-course Pavement
- Project Closeout (incl. final site visit, review of record drawings, and bond release)



Wearing course pavement joint overlap

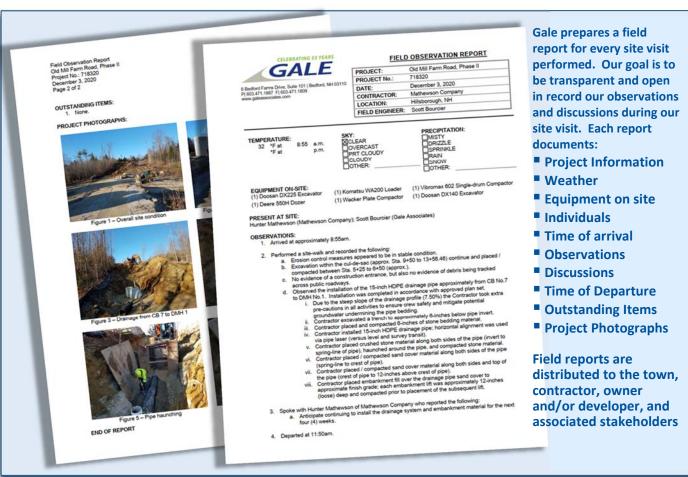


For each key construction milestone accomplished, Gale submits a summary report of all findings to the Town in association with each of the milestone activities. Each milestone summary report provides the Town with an opinion of the observed activity, copies of any test results associated with that activity, and (as requested by the Developer/Owner) bond estimate reductions.

In addition to performing key construction milestone (a.k.a scheduled) site visits, Gale performs supplemental arbitrary (a.k.a unscheduled) site visits. Arbitrary site visits occur primarily during earth-moving activities (i.e., cuts and fills) and utility construction to record development is completed in accordance with the approved plans and good construction practices. All sites visits are proposed to be "part-time" to observe a sample of the Contractor's construction means and methods. While "full-time" observations can be performed, the cost of full-time observations is high compared to the additional documentation recorded.

Gale prepares field reports for all site visits (milestone and arbitrary). Field reports document equipment on-site, activities observed, and on-site discussions, along with identifying outstanding items to be corrected. Field reports are distributed to the Contractor, Engineer-of-Record, Developer/Owner and the Town.

During construction, field changes may be required. Gale's approach is to notify the Town to determine the approval level of the change: Minor, Administrative, or Planning Board. While some field changes are minor and can be noted on the final as-built plans, others may require the Developer/Owner's engineer-of-record to prepare a revised plan to document the proposed change for Administrative or Planning Board approval. Similar to the original review process, Gale is available to assist the Town in the decision of the field change.





Section 7Billing Rate Structure

(submitted separately as requested in RFQ)



Section 8Conflicts of Interest Statements



Town of Barrington, New Hampshire

Professional Engineering Services

CONFLICT OF INTEREST STATEMENT

I, Jon F. Lindberg, P.E., Principal at Gale Associates, Inc. states that there are no conflicts of interest related to the performance of work for the Town of Barrington under this solicitation.

Jon F. Lindberg, P.E Principal

February 1, 2021

Date



Town of Barrington, New Hampshire

Professional Engineering Services

LEGAL PROCEEDINGS STATEMENT

Gale Associates, Inc. has been named party to dispute resolution proceedings as follows:

- Peralta Community College District, California (2019). Gale is named as a 3rd party to Owner/Contractor/ Manufacturer dispute regarding construction quality, incomplete system installation, and methods and materials deficiencies. Legal proceeding will be in the Superior Court of the State of California, County of Alameda. We have entered into a Common Interest Agreement with Plaintiff and all parties have initiated mediation to resolve the dispute.
- Vizcaya Condominium Association, Inc. vs. Northfield Mass. Associates, LLC: Vizcaya filed suit against the developer, prime architect (Lessard Associates) and approximately 75 additional firms claiming negligence in the design and construction of their complex in New Jersey. Services were completed by Gale to Lessard as "design assist" for exterior building enclosure assemblies in 2006 and 2007. Gale was not involved with final design or construction phases. Gale was first notified of this dispute in January 2020. We are currently waiting on dismissal as defined by the NJ Statute of Repose.

Jon F. Lindberg, P.E., Principal

February 1, 2021

Date